RICON®

INNOVATION IN MOBILITY™

ECLIPSE®
F8000 (A) Series
Export Use
Wheelchair and Standee Lift

PRINT

Service/Owner Manual

(To be retained by Owner After Installation by Authorized RICON Dealer)

06/19/98

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Other U.S. and foreign patents pending

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This RICON product must be installed and serviced only by authorized RICON dealers.

The authorized RICON dealer must refer to this manual for installation instructions.

The owner must refer to this manual for operating instructions, then retain it for future reference by authorized RICON dealers who perform service and repairs.

Customer Name:_____

Installing Dealer:_____

Date Installed:_____

Serial Number:_____

TRADEMARK ACKNOWLEDGMENTS

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Activan®	Ricon®	UNI-lite™
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Eclipse®	Spirit Swing Lift®	

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RECORD OF CHANGE OR REVISION

This listing contains a record of all page changes and/or revisions added to or to be added into this manual, since the last revision. Not all of the listed pages contain changes but are included for ease of installation. The arrows (**»** or **º**) found on the outer edge of the page(s) indicate the revised or changed area, section, or paragraph of the page.

REV.	PAGE(S)	DESCRIPTION OF CHANGE	ECR/ECO
32DF8AE0.C 06/19/98	ALL	Various revisions and updates.	001575/3240
END OF LIST			

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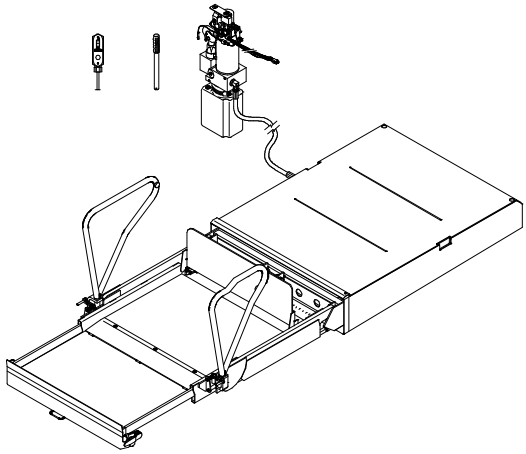
NOTES

I. INTRODUCTION

The RICON Eclipse® F8000 (A) Series Export Use Wheelchair and Standee Lift provides wheelchair access to mass transit vehicles. The patented movement ensures smooth, safe entry and exit and easily lifts up to 660 pounds (300 kilograms). It is designed to be operated by a trained attendant or vehicle driver. After the lift is manually extended OUT (deployed) from the vehicle, the operator uses the control pendant to raise the lift to the vehicle floor height. The user boards the large non-skid platform and the operator uses the control pendant to gently lower the platform to the ground. After the user departs, the platform is raised and manually retracted IN (stowed).



The Eclipse® is an underfloor lift with a powerful electrical hydraulic pump. The lift also contains a built-in manual backup pump. If the lift loses electrical power, two or more people can raise and/or lower the lift manually.

This manual contains operation and maintenance instructions and a troubleshooting guide for the lift. It is important to user safety that the lift operator(s) be completely familiar with the Operating Instructions chapter of this manual. Once the lift is installed, it is very important that the lift be properly maintained by following the Ricon recommended cleaning, lubrication, and inspection instructions.

If there are questions about this manual, or additional copies are needed, please contact the Ricon Product Support Department at one of the following locations:

Ricon Corporation
7900 Nelson Rd.
Panorama City, Ca 91402 . . . . (818) 267-3000
Outside (818) Area Code . . . . (800) 322-2884
World Wide Website . . . . riconcorp.com

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Littlemoss Business Park, Littlemoss Road
Droylsden, Manchester
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Ricon Scandinavia A/S
Stanseveien 27
N-0976 Oslo
Norway . . . . (+47) 22 16 70 90

RICON
1-YEAR LIMITED WARRANTY

Ricon Corporation (Ricon) warrants to the original purchaser of this product that Ricon will repair or replace at its option any parts that fail by reason of defective material or workmanship as follows:

CRepair or replace parts for a period of one (1) year from date of purchase. A complete list of parts covered by this warranty can be obtained from an authorized Ricon dealer.

CLabor costs for specified parts replaced under this warranty for a period of one (1) year from date of purchase. A Ricon rate schedule determines the parts covered and labor allowed.

If You Need to Return a Product: Return this Ricon product to the installing dealer. Please give as much advance notice as possible and allow a reasonable amount of time for repair.

If You are Traveling: All authorized Ricon dealers will honor this warranty. Consult a telephone directory or our Product Support Department for the name of the nearest authorized Ricon dealer.

This Warranty does not Cover:

CMalfunction or damage to product parts caused by accident, misuse, lack of proper maintenance, neglect, improper adjustment, modification, alteration, the mechanical condition of the vehicle, road hazards, overloading, failure to follow operating instructions, or acts of Nature (i.e., weather, lightning, flood, etc.).

Note: Ricon recommends that this product be inspected by an authorized Ricon dealer at least once every six months or sooner if necessary. Any required maintenance or repair should be performed at that time.

⚠ WARNING

THIS PRODUCT HAS BEEN DESIGNED AND MANUFACTURED TO EXACT SPECIFICATIONS. MODIFICATION OF THIS PRODUCT IN ANY RESPECT CAN BE DANGEROUS.

This Warranty is Void if:

CThe product has been installed or maintained by someone other than an authorized Ricon dealer.

CThe product has been modified or altered in any respect from its original design without written authorization by Ricon.

Ricon disclaims liability for any personal injury or property damage that results from operation of a Ricon product that has been modified from the original Ricon design. No person or company is authorized to change the design of this Ricon Product without written authorization by Ricon.

Ricon's obligation under this warranty is exclusively limited to the repair or exchange of parts that fail within the applicable warranty period.

Ricon assumes no responsibility for expenses or damages, including incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply.

Important: The warranty registration card must be completed and returned to Ricon within twenty (20) days after installation of this Ricon product for the warranty to be valid. The warranty is not transferable.

The warranty gives specific legal rights, and there may be other rights that vary from state to state.

DEALERS INFORMATION

Because of the specialized nature of the product, Ricon does not sell directly to the user. Instead, the product is distributed through the worldwide network of authorized Ricon dealers, who perform the actual sale and installation.

- When the product is received, check the **Shock Indicator** on shipping box, unpack the product and check for freight damage. Claims for any damage should be made to the carrier immediately.

- Be sure the installation kit contains all items listed on the kit packing list. **Please report any missing items immediately to the Ricon Product Support Department.** The warranty and owner's registration cards must be completed and returned to Ricon within twenty (20) days for the warranty to be valid.

NOTE

The Sales/Service Personnel must review the Warranty and this Service/Owner Manual with the user to be certain that they understand the safe operation of the product. Instruct the user to follow the operating instructions without exception.

GENERAL SAFETY PRECAUTIONS

The following general safety precautions must be followed during installation, operation, service and maintenance:

1. Under no circumstances should installation, maintenance, repair, and adjustments be attempted without the immediate presence of a person capable of rendering aid.

2. An injury, no matter how slight, should always be attended. Always administer first aid or seek medical attention immediately.

3. Protective eye shields and appropriate clothing should be worn at all times.

4. To avoid injury, always exercise caution when operating and be certain that hands, feet, legs, and clothing are not in the path of product movement.

5. Batteries contain acid that can burn. If acid comes in contact with skin, flush affected area with water and wash with soap immediately.

6. Always work in a properly ventilated area. Do not smoke or use an open flame near a battery.

7. Do not lay anything on top of a battery.

8. Check under vehicle before drilling so as not to drill into frame, subframe members, wiring, hydraulic lines, fuel lines, fuel tank, etc.

9. Read and thoroughly understand the operating instructions before attempting to operate.

10. Inspect the product before each use. If an unsafe condition, unusual noises or movements, exists, do not use it until the problem is corrected.

11. Keep others clear during operation.

12. The product requires regular periodic maintenance. A thorough inspection is recommended at least once every six months. The product must always be maintained at the highest level of performance.

PRODUCT TERMINOLOGY

The references used throughout this manual are illustrated in Figure **[1-1]** and defined in Table **[1-1]**. Refer to Chapter **V** for more details.

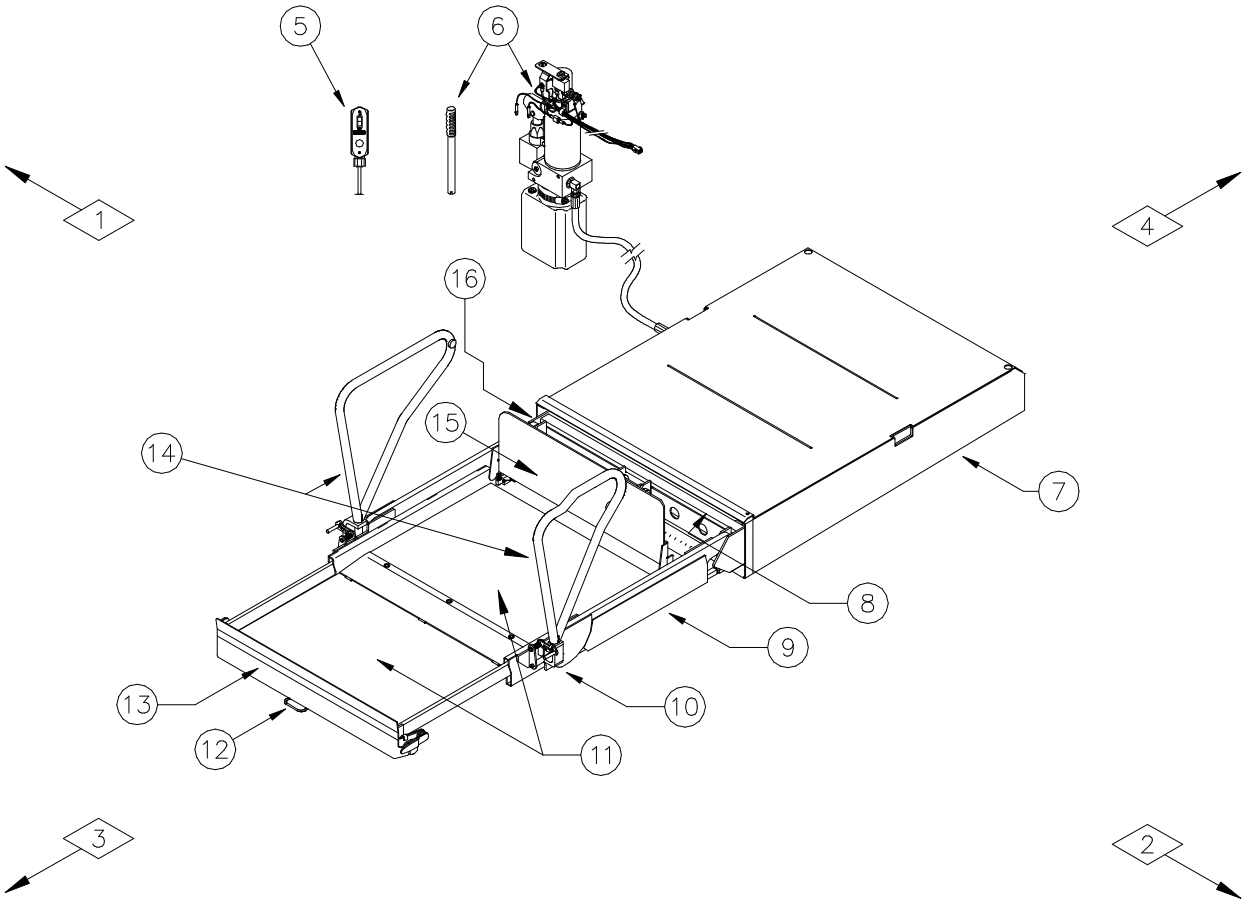

FIGURE [1-1]: LIFT REFERENCES

TABLE [1-1]: F8000 (A) SERIES LIFT TERMINOLOGY		
REF.	**NAME**	**DESCRIPTION**
1	Left	Reference points from outside the vehicle looking inward at the platform.
2	Right	
3	Front	
4	Rear	
5	Control Pendant	Hand-held device used to control the lift operating functions.
6	Power Unit	Electro-hydraulic pump that performs the lift raise/UP and lower/DOWN functions.
7	Lift Enclosure	Cassette type structure, rigidly attached to the vehicle, that contains the lift.
8	Carriage	Part of traveling frame that contains the necessary components to extend/deploy the lift OUT and retract/stow the lift IN.
9	Lifting Frame	Part of the frame that connects the platform to the hydraulic cylinder for raising/UP and lowering/DOWN.
10	Handrail Lock Assembly	Manually activated mechanism used to lock the handrail in the upright position.
11	Platform	Component where the occupant sits or stands during lift operations. Consists of fixed platform and sliding platform sections.
12	Platform Lock Handle	Handle used to lock / or release sliding platform section.
13	Platform Rollstop	Front barrier to prevent the wheelchair from slow, inadvertent rolling off the platform during lift operation.
14	Folding Handrails	Provide a hand-hold for the platform occupant.
15	Bridgeplate	Plate that bridges across the platform and the vehicle threshold. Also serves as a rear rollstop when the platform is at the deployed/OUT and ground level positions.
16	Manual Release Handle	Handle used to release the platform for stowing.
END OF TABLE		

NOTES

II. INSTALLATION

The RICON Eclipse® F8000 (A) Series Export Use Wheelchair and Standee Lift is installed in a cassette mounted to the underside of the vehicle and behind the bottom step riser. Due to the wide range of applications for the lifts, it is impossible to provide specific information about every possible installation. The following general procedures will apply to many installations. Contact the Ricon Product Support Department for instruction about installations not covered. To install the lift, refer to the following sections and perform the procedures carefully and in the order that they are presented. Be certain that the installation instructions are followed exactly and do not eliminate any steps or modify the product.

A. MECHANICAL

To install the lift, follow this procedure:

1. LIFT LOCATION

   The location of the lift depends on the motion path of the platform. The lift must be located so that the platform can move unobstructed through its required range of travel.

2. LIFT MOUNTING

   a. Refer to Figure **[2-1]**. Mechanical support of the lift will be provided at four (two on each side) attachment points. Each attachment point consists of two 5/16-18 tapped bolt inserts.

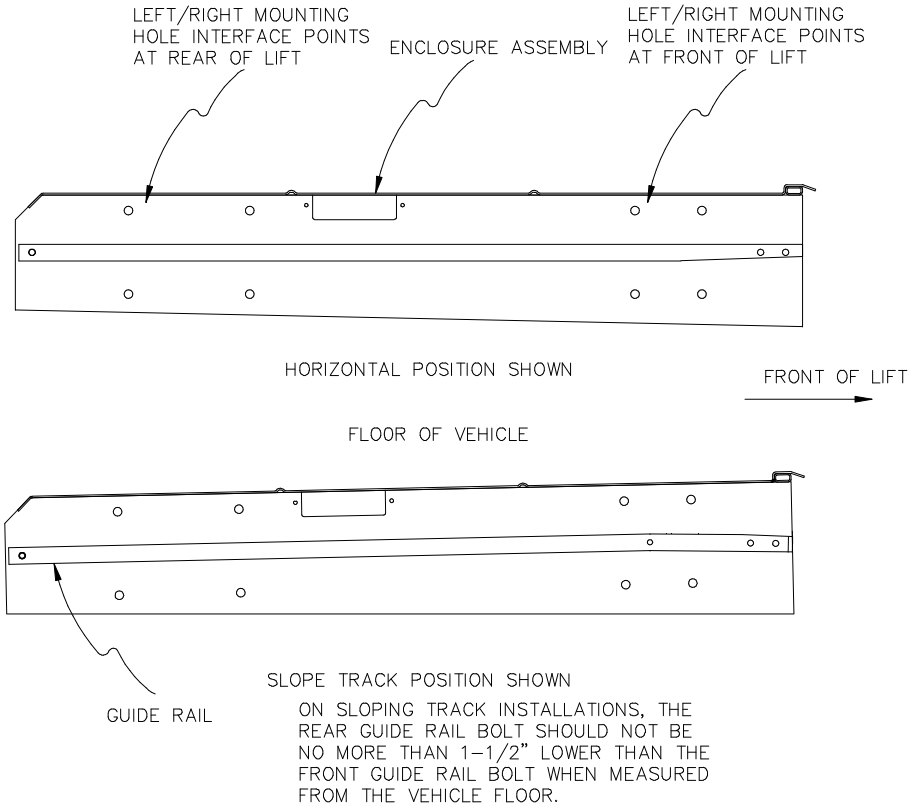
LEFT/RIGHT MOUNTING HOLE INTERFACE POINTS AT REAR OF LIFT
ENCLOSURE ASSEMBLY
LEFT/RIGHT MOUNTING HOLE INTERFACE POINTS AT FRONT OF LIFT
HORIZONTAL POSITION SHOWN
FRONT OF LIFT
FLOOR OF VEHICLE
GUIDE RAIL
SLOPE TRACK POSITION SHOWN
ON SLOPING TRACK INSTALLATIONS, THE REAR GUIDE RAIL BOLT SHOULD NOT BE NO MORE THAN 1–1/2" LOWER THAN THE FRONT GUIDE RAIL BOLT WHEN MEASURED FROM THE VEHICLE FLOOR.

FIGURE [2-1]: LIFT MOUNTING ATTACHMENT POINTS

   b. Since lift mounting varies from one model to another, the vehicle mounting brackets for attachment of the lift are not supplied. When fabricated, the mounting brackets must meet the criteria listed in Table **[2-1]**.

TABLE [2-1]: LIFT MOUNTING BRACKET LOAD CAPACITIES		
Loading Direction	**Front Supports** (total capacity for both left and right points)	**Rear Supports** (total capacity for both left and right points)
Vertical	2300 lbs	1100 lbs
Longitudinal (perpendicular to vehicle drive axles)	450 lbs	2000 lbs
Lateral (parallel to vehicle drive axles)	225 lbs	1000 lbs
END OF TABLE		

c. Refer to Figure **[2-2]**. Use bolts, washers and lock washers provided to affix the lift. Use additional flat washers as necessary to achieve required thread engagement. Torque bolts to 17 Ft-lb or 248 NM.

⚠ CAUTIONS

- HARDWARE FOR MOUNTING THE LIFT MUST BE A MINIMUM OF 5/16" DIAMETER, WITH A GRADE OF 5 OR BETTER.
- IF BOLTS PROTRUDE TOO FAR INTO THE ENCLOSURE, INTERFERENCE WITH THE LIFT TRAVELING FRAME WILL RESULT.

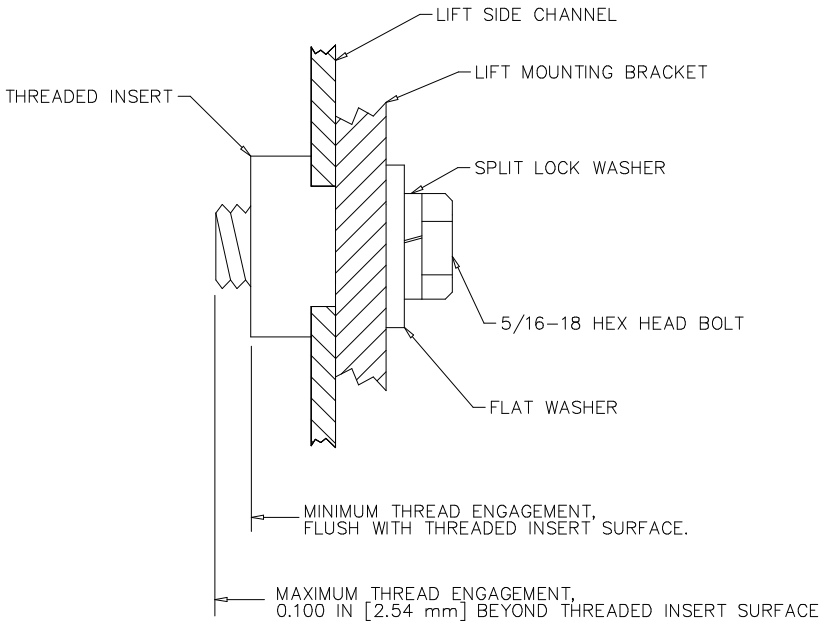

FIGURE [2-2]: LIFT MOUNTING FASTENER

3. HYDRAULIC POWER UNIT

a. Unit Mounting

⚠ CAUTIONS
THE HYDRAULIC POWER UNIT MUST BE LOCATED SO THAT: C THE DOOR ON THE PUMP ENCLOSURE MUST OPEN/CLOSE FREELY WITH NO OBSTRUCTIONS. C THE MANUAL PUMP HANDLE MUST BE ACCESSIBLE AND OPERABLE. C THE OPERATOR HAS AN UNOBSTRUCTED VIEW OF THE PLATFORM SURFACE WHILE OPERATING THE MANUAL BACK-UP SYSTEM.

C The design capacity of the bracketry used to mount the hydraulic power unit must meet the criteria listed in Table **[2-2]**. These criteria will ensure that the pump mounting will withstand loads applied during manual pump operation.

TABLE [2-2]: HYDRAULIC POWER UNIT BRACKET LOAD CAPACITIES

LOADING DIRECTION	BRACKET CAPACITY
Vertical	125 lbs
Longitudinal (perpendicular to vehicle drive axles)	200 lbs
Lateral (parallel to vehicle drive axles)	100 lbs

END OF TABLE

b. Unit-to-Cylinder Connection

1. Connect the main hydraulic hose to the hydraulic power unit if not already done.

2. Operate the manual backup pump until hydraulic fluid flows out of the open end of the main hydraulic hose.

3. Lower the platform to ground level.

4. Remove the plug on the top of the hydraulic pump tank. Make sure that the hydraulic fluid in the tank is at the FULL level. Fill only with Texaco No. 15 aircraft hydraulic fluid (or equivalent U.S. mil spec H5606E/F oil) and reinstall the plug.

B. ELECTRICAL

1. INTERLOCK WIRE

For electrical installation of the interlock wiring, refer to Figure **[2-3]** and follow this procedure:

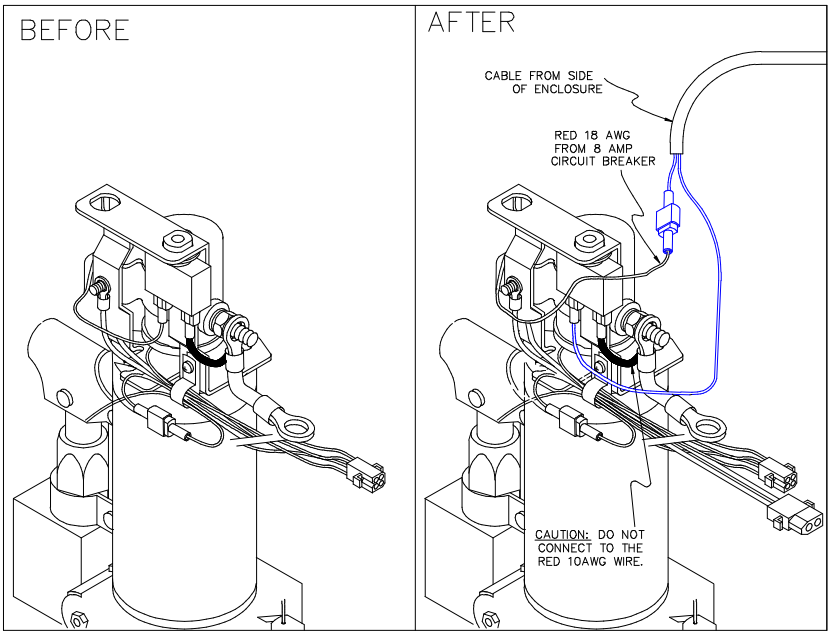
BEFORE
AFTER
CABLE FROM SIDE OF ENCLOSURE
RED 18 AWG FROM 8 AMP CIRCUIT BREAKER
CAUTION: DO NOT CONNECT TO THE RED 10AWG WIRE.

FIGURE [2-3]: INTERLOCK WIRING

a. Route the interlock cable from side channel of the lift enclosure to the 8-Amp circuit breaker on the pump unit.

b. Strip both interlock wires 1/4" back.

c. Crimp the supplied male connector to the black interlock wire.

d. Crimp the female connector to the white interlock wire.

e. Remove the 18AWG wire from the circuit breaker terminal and attach it to the interlock wire with male connector (black) at the end.

f. Connect the white interlock wire with female connector to the empty terminal on the 8 Amp breaker.

2. WIRING FOR OPTIONAL PUMP ENCLOSURE

For electrical installation of the optional pump enclosure, refer to Figure **[2-4]** and follow this procedure:

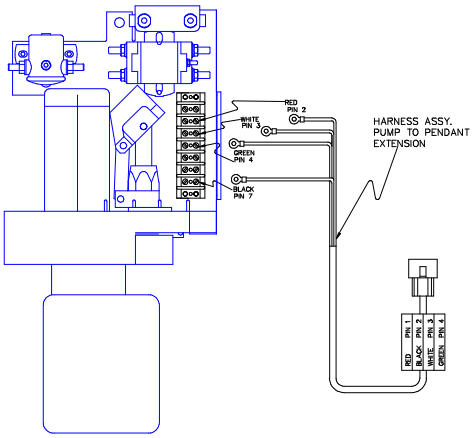

FIGURE [2-4]: WIRING FOR OPTIONAL PUMP ENCLOSURE

a. Crimp the supplied ring terminals to the harness assembly as shown.

b. Route and connect the "Pump to Pendant Harness Extension" to the pump enclosure assembly.

c. Attach the ring terminals to the terminal board as shown.

3. MAIN WIRING

Whether the vehicle electrical system is +12VDC or +24VDC, insulated return or chassis ground, the electrical installation is similar. To install electrical power to the lift, follow this procedure:

⚠ CAUTION

CHECK VEHICLE BEFORE DRILLING. DO NOT DRILL INTO FACTORY WIRING, HYDRAULIC LINES, FUEL LINES, FUEL TANK, ETC.

a. At vehicle engine or battery compartment, mount supplied Main Circuit Breaker within 10 - 12" (25 - 30 cm) of battery.

b. Adjacent to lift hydraulic pump unit, drill one 3/4" (19.5-mm) hole through vehicle floor, deburr hole, and install grommet.

c. Insert lift power cable harness through drilled hole.

⚠ CAUTION

WHEN ROUTING POWER CABLE, AVOID HAZARDS SUCH AS VEHICLE DRIVE SHAFTS, MOVING SUSPENSION PARTS, EXHAUST SYSTEMS, ETC.

d. From beneath vehicle, run harness along vehicle frame to circuit breaker. Make sure harness does not interfere with moving or hot parts and secure with cable ties every 18" (45 cm).

e. At engine compartment, cut and retain 12" (30 cm) section from end of harness RED wire.

f. Measure RED wire to reach circuit breaker and cut and remove any excess wire from harness.

g. Using wire crimpers, crimp supplied terminal to end of RED harness wire and connect to circuit breaker AUX terminal.

h. Crimp supplied terminals to both ends of previously cut 12" (30 cm) section of RED wire.

i. Connect end of 12" (30 cm) section of RED wire to circuit breaker BAT terminal.

⚠ WARNING

- WEAR PROTECTIVE CLOTHING AND EYE PROTECTION AT ALL TIMES. BATTERIES CONTAIN ACID THAT CAN BURN. IF ACID COMES INTO CONTACT WITH SKIN, IMMEDIATELY FLUSH AFFECTED AREA WITH WATER AND WASH WITH SOAP.
- DO NOT SMOKE OR USE OPEN FLAME IN THE VICINITY OF BATTERY. ALWAYS WORK IN PROPERLY VENTILATED AREA.
- DO NOT LAY ANYTHING ON TOP OF A BATTERY.

j. Connect other end of 12" (30 cm) section of RED wire to POSITIVE (+) terminal of vehicle battery.

C. FINAL ADJUSTMENTS

⚠ WARNING

FAILURE TO PROPERLY ADJUST EQUIPMENT MAY RESULT IN UNSAFE OPERATING CONDITIONS FOR THE WHEELCHAIR OCCUPANT AND ATTENDANT.

1. FLOOR LEVEL TRAVEL LIMIT SETTING

   The floor level travel limit setting is set at the factory for maximum travel. Follow this procedure for checking and setting the platform travel limit at the proper vehicle floor level.

   a. Deploy the lift.

   b. Raise platform to the proper vehicle floor level and measure the distance between it and the top platform surface. The floor level travel limit must be set so that the top platform surface is between 1" and 1.6" above the vehicle floor. Proceed with the following adjustment if distance is incorrect.

      NOTE: Do not attempt to adjust bridgeplate until the travel limit has been set.

   c. Provide support to the lift platform after raising platform.

   d. Gain access to underside of platform.

   e. Refer to Figure **[2-5]**. Loosen lock-nut from against trunion.

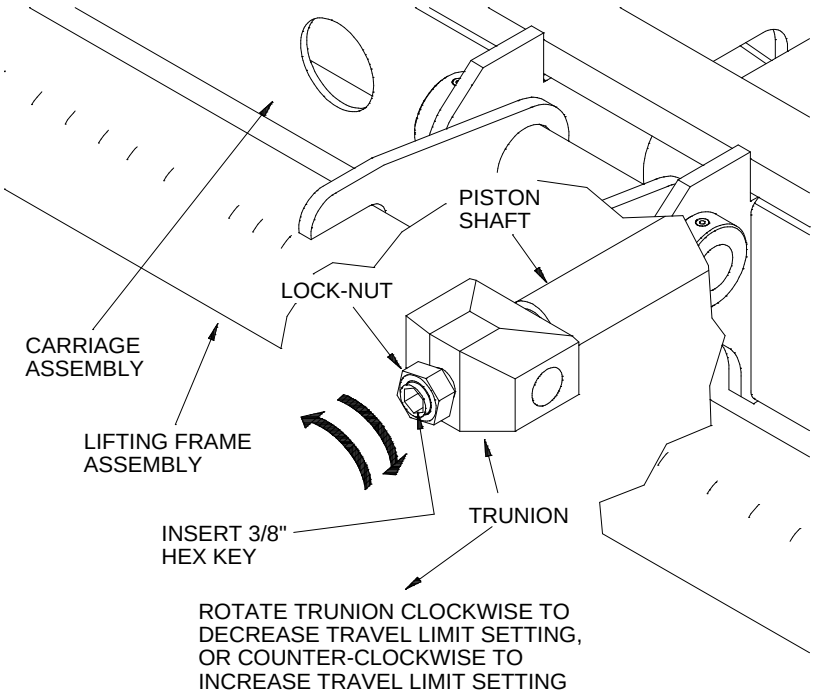
PISTON SHAFT
LOCK-NUT
CARRIAGE ASSEMBLY
LIFTING FRAME ASSEMBLY
INSERT 3/8" HEX KEY
TRUNION
ROTATE TRUNION CLOCKWISE TO DECREASE TRAVEL LIMIT SETTING, OR COUNTER-CLOCKWISE TO INCREASE TRAVEL LIMIT SETTING

FIGURE [2-5]: TRAVEL LIMIT ADJUSTMENT

f. Refer to Figure **[2-6]**. Remove bolts retaining keeper plates on both sides of lifting frame, and remove keeper plates. This will allow the trunion to rotate freely around the hydraulic cylinder piston shaft.

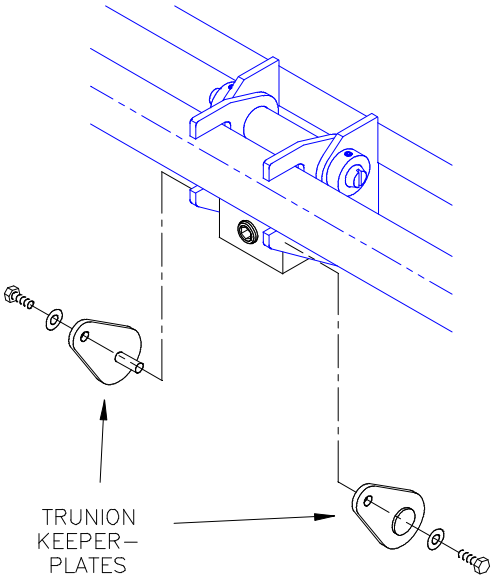

FIGURE [2-6]: TRUNION REMOVAL

NOTE: It may be necessary to drive the cylinder piston shaft out slightly to enable free rotation of the trunion around the piston shaft. If so, pump the manual back-up system in an up/down motion until free rotation is achieved.

g. Turn the trunion clockwise to decrease the travel limit distance, or counter-clockwise to increase the travel limit distance.

NOTE: If increasing travel limit distance, loosen the bridgeplate adjusting hex-nuts toward the end of pullrods to avoid damage.

h. Align the lifting frame and trunion keeper pin holes, and reinstall keeper pins through the lifting frame and trunion. If keeper pins do not insert easily, remove keeper pins and check to ensure proper alignment between installation holes.

i. Fasten keeper pins to the lifting frame using the removed bolts. Remove platform support.

j. Lower to ground level. Raise to vehicle floor level, and from stow level to vehicle floor level, to verify that the travel limit stops at the proper vehicle floor level. Repeat this procedure if further adjustment is required. Tighten lock-nut against trunion.

NOTE: If the desired platform travel limit is within 1" of the proper vehicle floor level, follow the procedure below to allow for further adjustment without having to remove keeper pins.

k. Raise platform to its vertical travel limit and determine the amount of adjustment required (i.e., 1/2", etc.), then lower platform 1" to 2".

l. Remove lock-nut from piston shaft, and, using a 3/8" hex key, insert and turn the cylinder piston shaft clockwise to increase the travel limit distance, or counter-clockwise to decrease the travel limit distance. A leverage of 12" to 18" will be required to turn the cylinder piston shaft.

m. Lower to ground level. Raise to vehicle floor level, and from stow level to vehicle floor level, to verify that the travel limit stops at the proper vehicle floor level. Repeat steps **k** and **l** if further adjustment is required. If not, replace and tighten lock-nut against trunion.

2. BRIDGEPLATE ADJUSTMENT

NOTE: The floor level travel limit must be set before attempting to adjust bridgeplate.

Refer to Figure **[2-7]**. Bridgeplate deployment is controlled by the bridgeplate actuator pullrods. The length adjustment of each pullrod determines the position of the bridgeplate relative to the platform as the platform moves through its vertical range of travel.

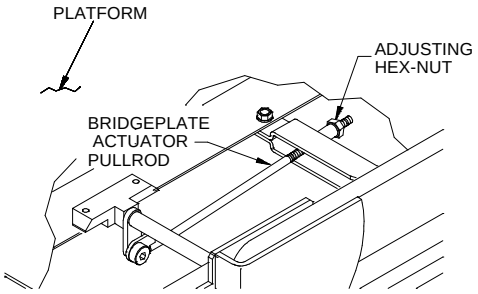

FIGURE [2-7]: BRIDGEPLATE ADJUSTMENT

The actuator pullrod must be adjusted to allow full deployment of the bridgeplate as the platform reaches the vehicle floor level travel limit. Lengthening the pullrod delays deployment of the bridgeplate, while shortening the rod accelerates deployment of the bridgeplate. Both actuator pullrods must be adjusted simultaneously and evenly so that one pullrod does not drive the motion of the bridgeplate in any one direction.

⚠ CAUTION

PREMATURE DEPLOYMENT OF THE BRIDGEPLATE COULD CREATE A DANGEROUS SITUATION FOR THE LIFT OCCUPANT, AND CAUSE DAMAGE TO THE BRIDGEPLATE, PLATFORM, OR VEHICLE.

a. Deploy and raise platform to its vertical travel limit.

b. Gain access to underside of platform.

   NOTE: The pullrod adjustments must be performed simultaneously and evenly.

c. Turn adjusting hex-nuts at each pullrod clockwise an equal number of turns to lower the bridgeplate at the vehicle floor level, or counter-clockwise to raise the bridgeplate at the vehicle floor level.

d. Lower platform to stow level, then raise platform back to its vertical travel limit. The bridgeplate must be fully deployed at the vertical travel limit. If not, repeat steps **c** and **d**.

3. LIFT STOW LEVEL SETTING

The following procedure provides for setting the proper platform location as the platform approaches stow level from above (vehicle floor level). Adjustment requires setting two (2) setscrews that determine the platform position as it encounters the left/right rocker stop bars. The proper stow level is achieved when the lift stows without interference as it moves along the lift guide rails located inside the lift enclosure assembly.

a. Deploy the lift. This procedure may be performed without raising handrails and/or deploying sliding platform.

b. Refer to Figure **[2-8]**. Be certain that the sliding platform guide rails make contact with the rocker stop bars.

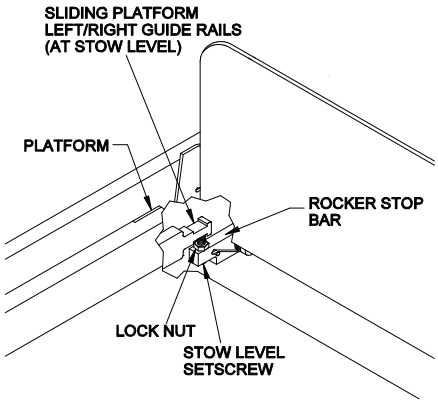

FIGURE [2-8]: STOW LEVEL ADJUSTMENT

c. Gain access to underside of platform.

d. Loosen lock-nuts from against the left and right rocker stop bars.

e. From the underside of the rocker stop bars, turn setscrews against guide rails clockwise to raise lift stow level setting, or counter-clockwise to lower lift stow level setting.

NOTE: Be sure to adjust setscrews on both sides of lifting frame simultaneously. This will ensure proper leveling of platform.

f. Repeat this procedure and adjust stow level position as required.

g. When the exact stow level has been achieved, tighten lock-nuts against rocker stop bars.

4. DEPLOY LOCK SETTING

The following procedure provides for setting the deploy lock position of the lift carriage assembly at full deployment. The proper deploy lock position is determined by the gap distance between the lift enclosure deploy lock striker and the lift carriage deploy lock latch bar, and is adjusted by setting two (2) carriage stop block set screws located inside the lift enclosure assembly at the front of the lift.

a. Refer to Figure **[2-9]**. Deploy the lift normally as described in the Operating Instructions chapter of this manual. The deploy lock handle should be in its upright position, with the (spring-loaded) deploy lock latch bar engaged by the deploy lock striker.

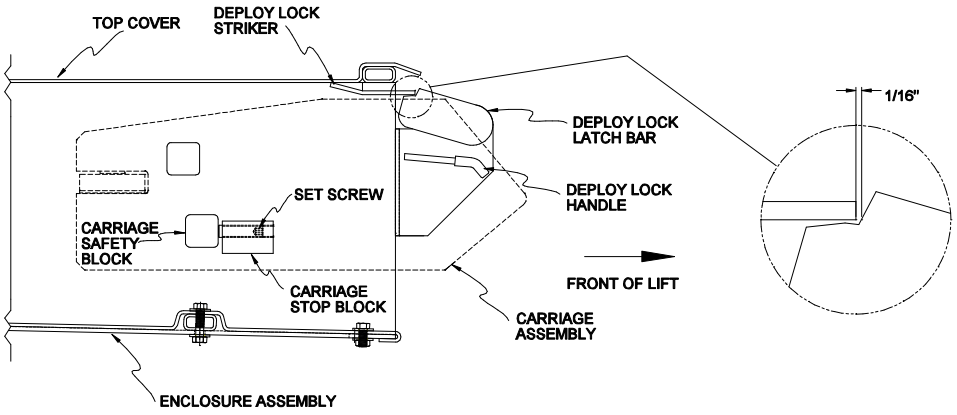

FIGURE [2-9]: DEPLOY LOCK ADJUSTMENT

b. Determine how much adjustment is required, then stow the lift. The distance between the deploy lock latch bar and striker should be no more than 1/16". If the distance is out of tolerance or the deploy lock mechanism does not engage properly, continue with this adjustment procedure.

c. From the front of the lift with the carriage fully stowed, gain access to the left/right carriage stop blocks attached to the enclosure assembly mounting frame channels.

d. With a long allen wrench, turn the stop block set screws clockwise to decrease the gap distance, or counter-clockwise to increase the gap distance. One (1) full turn is equivalent to 1/16" of adjustment. Be sure to adjust set screws simultaneously an equal number of turns.

e. Repeat check procedure as described in the above section and adjust set screws as required until the proper gap distance is achieved. Stow and deploy the lift several times to ensure proper operation.

5. STOW LOCK SETTING

The proper stow lock setting is determined by the position of the carriage assembly safety blocks relative to the position of the carriage stop blocks attached to the enclosure assembly at the rear of the lift. Refer to Figure **[2-10]**. Setting the stow lock mechanism requires the adjustment of two (2) carriage stop block set screws so that the stow lock hook is properly engaged by the stow lock striker plate.

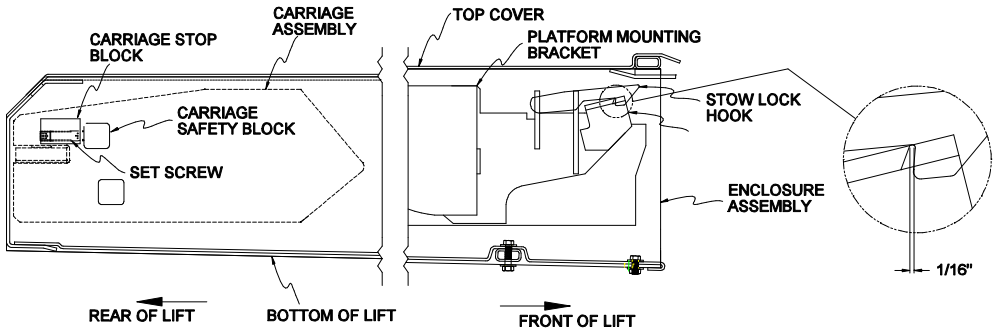

FIGURE [2-10]: STOW LOCK HOOK ADJUSTMENT

a. Stow the lift completely inside the lift enclosure. The spring-loaded stow lock handle located on the left-side of the enclosure assembly must be in its "down" position, with the stow lock hook engaged by the stow lock striker plate.

b. Determine how much adjustment is required. The distance between the deploy lock hook and striker plate should be no more than 1/16". If the distance is out of tolerance or the stow lock mechanism does not engage properly, proceed with this adjustment procedure.

c. Make sure lift is fully stowed.

d. From the rear of the lift, remove plugs from rear channel left/right carriage stop blocks access holes.

e. With an allen wrench, turn the stop block set screws clockwise to decrease the gap distance, or counter-clockwise to increase the gap distance. One (1) full turn is equivalent to 1/16" of adjustment. Be sure to adjust set screws simultaneously an equal number of turns.

f. Repeat check procedure as described above and adjust set screws as required until the proper gap distance is achieved. Deploy and stow the lift several times to ensure proper operation of the stow lock mechanism.

D. VERIFY INSTALLATION

- Be certain there is no interference with operation of the lift by interior or exterior components.

- The lift is designed to carry the weight of a wheelchair and its passenger. The vehicle structure must be adequate to support all loads produced during lift operation, as well as forces incurred by the motion of the vehicle during driving.

⚠ CAUTIONS

- DO NOT OPERATE THE LIFT ELECTRICALLY OR MANUALLY DURING THE LOAD TEST. THE LOAD TEST IS DESIGNED TO TEST THE INSTALLATION MOUNTING OF THE LIFT **NOT** ITS LIFTING CAPACITY. REMOVE THE TEST WEIGHT IMMEDIATELY AFTER THE TEST.

- WHEN THE TEST WEIGHT IS PLACED ON THE PLATFORM, THE VEHICLE SUSPENSION WILL COMPRESS AND THE VEHICLE WILL LEAN. IF THE WEIGHTED PLATFORM TOUCHES THE GROUND, REMOVE THE WEIGHT, RAISE THE PLATFORM, AND RETEST.

The lift must be test loaded to 125% of its rated 660 pound load capacity to verify the integrity of the installation. Position the lift platform 2" - 6" above the ground, place **825** pounds in the center of the platform, and inspect the lift mounting points. REMOVE THE TEST WEIGHT.

- Run the lift through several complete cycles to ensure proper operation.

- Retrieve checklist from documentation kit. Perform the lift checklist inspection per Ricon document 32SL604.

E. CUSTOMER ORIENTATION

IMPORTANT
- Customer Orientation -

Ricon Sales/Product Support must review the Warranty and Service/Owner Manual with the customer to be certain he/she understands the safe operation of the lift. Instruct the customer to always follow the operating instructions without exception.

- Refer to Figure **[2-11]** and ensure that all decals are properly located and affixed as shown.

NOTE
The installing dealer must affix the Operating Instruction decal to the vehicle in a location clearly visible to the operator.

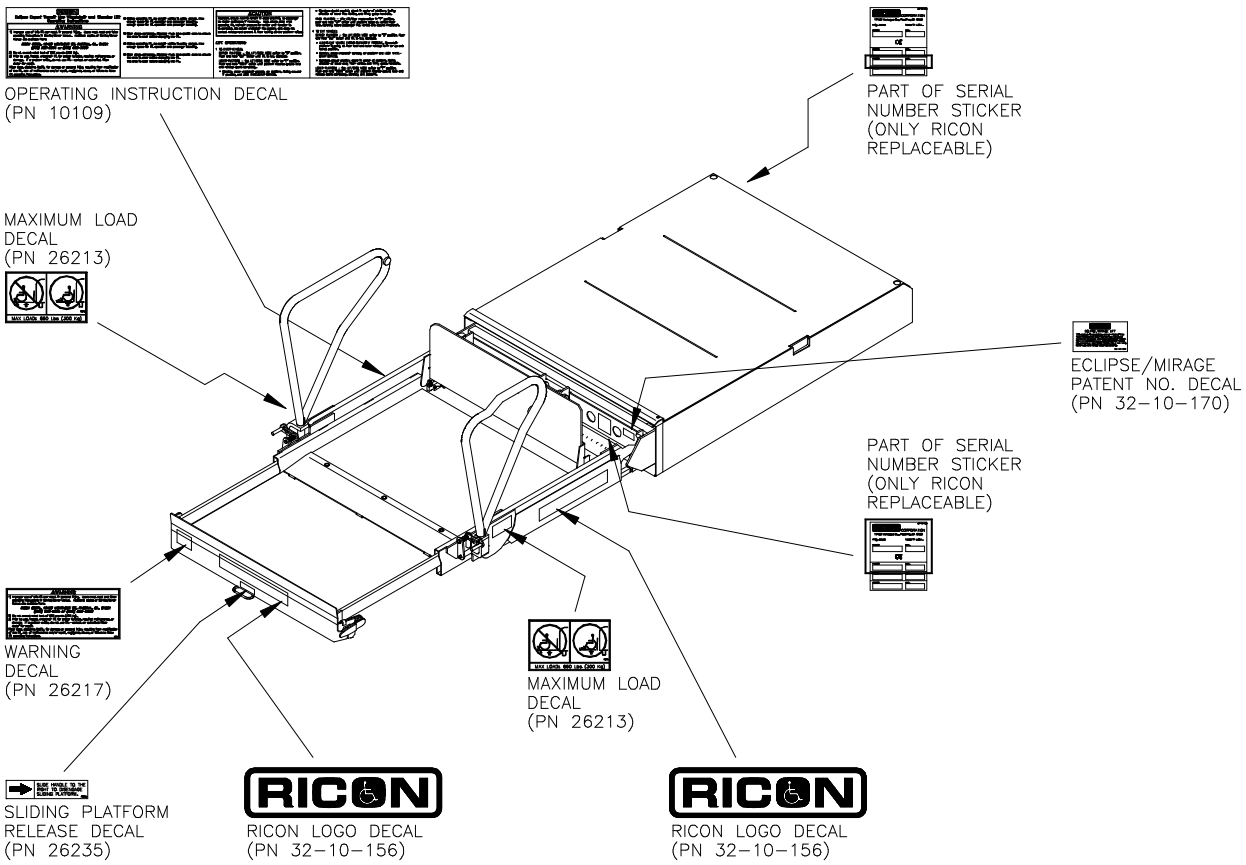

FIGURE [2-11]: DECAL LOCATIONS AND PART NUMBERS

-GO TO NEXT CHAPTER-

III. OPERATING INSTRUCTIONS

This chapter contains safety precautions, daily safety check, lift functions, control and indicator descriptions, and operating instructions for the RICON Eclipse® F8000 (A) Series Export Use Wheelchair and Standee Lift. This chapter must be read and thoroughly understood by the operator before attempting to use the lift.

A. SAFETY PRECAUTIONS

The following safety precautions must be complied with at all times when operating the lift:

- Refer to Figure **[3-1]**. A dangerous situation exists when using the lift if the vehicle is parked on a slope. Always operate the lift with the vehicle parked on level ground.

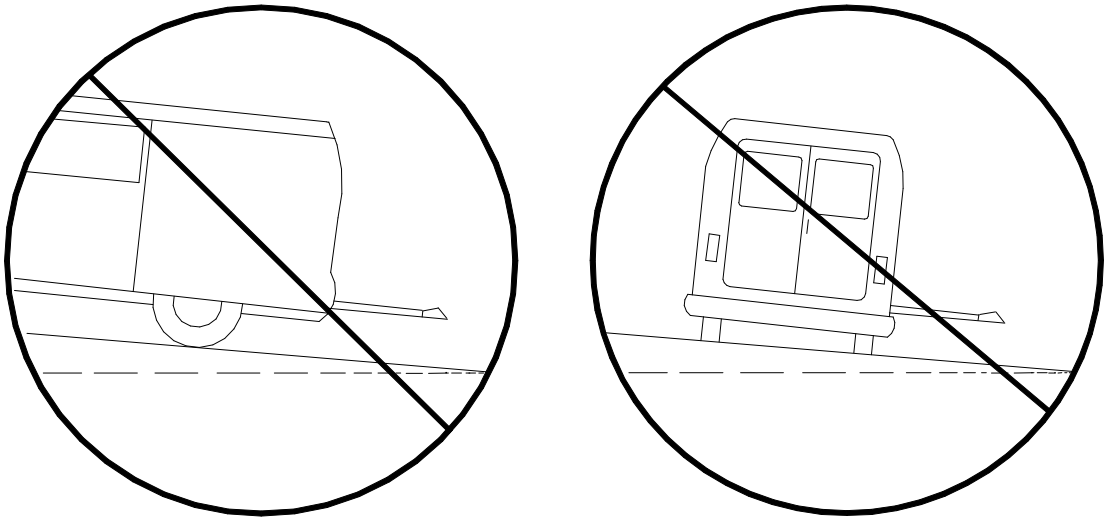

FIGURE [3-1]: UNSAFE VEHICLE SLOPING

- Vehicle must be safely parked with the emergency brake ON before using the lift.
- Inspect the lift prior to each use. If any unsafe condition exists or unusual noises or movements are noticed, DO NOT use and contact an authorized Ricon Dealer for repair.
- Read and comply with all warning labels and symbols affixed to the wheelchair lift.
- When using the lift, the occupant should always FACE OUTWARD.
- The platform rollstop is designed to prevent slow inadvertent rolling off the platform. The large rear wheels of a wheelchair can roll over the platform rollstop, so we insist that you always face outward. Hitting the platform rollstop with the small front wheels can tip the wheelchair and possibly injure the wheelchair occupant. Do not expect the rollstop to stop a quick moving wheelchair as it is not designed for that purpose. Use extreme care, board the platform slowly and then lock the wheelchair brakes.
- Be certain wheelchair fits safely on the platform and does not extend over the edges of the platform or interfere with operation of the rollstop.
- When exiting vehicle NEVER back onto the platform. Always face outward and make sure that the platform is at a safe vehicle floor-level position and the outer rollstop is in an up and locked position.

- Do not operate with a load in excess of 660 lbs. (300 kg).
- Do not place arms, legs, or clothing in or near moving parts.
- The lift is designed for ONE wheelchair and its occupant. Do not overload lift.
- Keep others clear while operating.
- Do not allow an untrained person to operate.
- Careful supervision is necessary if used by or near children.
- Do not allow anyone to stand on the bridgeplate. Bending this bridgeplate can cause dangerous interference with the platform as it raises or lowers.
- Always LOCK WHEELCHAIR BRAKES (power chair users should turn off power and set brake) before lift is operated.
- Use extreme care in wet conditions. Wheelchair brakes are less effective if the platform and/or wheelchair wheels are wet.
- Never leave platform outside of vehicle. Always return lift to stowed position after use.

Be sure that these safety precautions have been read and understood. Review them periodically, and ask any attendants or other operators to read them as well. If there are any questions, contact an authorized Ricon Dealer or call the Ricon Product Support Department.

B. DAILY SAFETY CHECK

Inspect the lift before each use and check that the following conditions are met before operating:

- All functions operate properly. If unusual noises or movements exist, DO NOT use and contact an authorized Ricon Dealer for repair.
- Vehicle interlock is operating properly.
- No objects that may interfere with operation are present.
- General appearance and lubrication are satisfactory and all fasteners are tight.

C. LIFT FUNCTIONS

For descriptions of the lift functions, refer to Figure **[3-2]** and Table **[3-1]**.

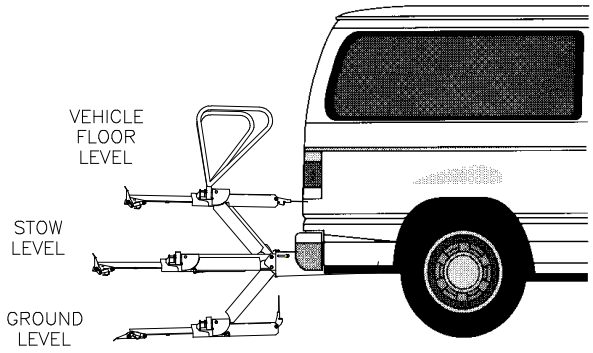

FIGURE [3-2]: PLATFORM POSITIONS

TABLE [3-1]: LIFT FUNCTIONS

FUNCTION	DESCRIPTION
/ UP	Platform is raised from its present position, either ground level or OUT/ deployed position (The rollstop automatically raises when the platform leaves ground level).
/ DOWN	Platform is lowered from its present position, either vehicle floor level or OUT/deployed position (The rollstop automatically lowers when the platform reaches ground level).

END OF TABLE

D. CONTROLS AND INDICATORS

For descriptions of the lift controls and indicators, refer to the following sections:

1. CONTROL PENDANT

Refer to Figure **[3-3]**. The control pendant is a hand-held, hardwired remote device that controls the lift functions. The pendant contains one spring-loaded, double-acting switch. The control pendant mounts to a wall clip inside the vehicle near the door opening. To operate the ↑ / UP or ↓ /DOWN functions, press and hold the switch until the function is completed.

The purpose of a power cut-off interlock system is to interfere with the operation of the lift if an unsafe condition is present. When interlock systems are added to the lift, the light is an indication whether or not the interlock is operating properly. The light is placed within the electrical system so that no matter which interlock system/method is used, the light will be ON when the interlock allows operation of the lift and OFF when the interlock has disabled the lift. When there is no interlock system installed, the light stays illuminated at all times.

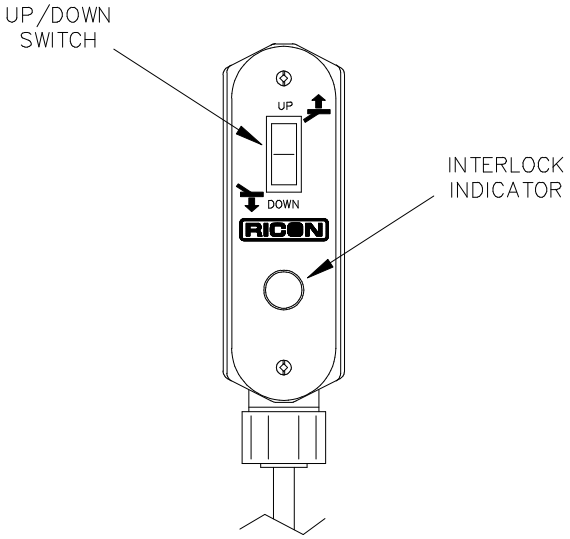

FIGURE [3-3]: CONTROL PENDANT

2. ELECTRICAL CONTROLS AND INDICATORS

The lift electrical controls and indicators are the circuit breakers that are designed to interrupt electrical power to the lift in case of a short circuit. The circuit breakers are located in the engine/ battery compartment and on the hydraulic power unit (or optional pump enclosure) located inside the vehicle at the rear door.

⚠ WARNING

REMINDER TO RICON DEALER:
NEVER REPLACE ANY CIRCUIT BREAKER WITH A CIRCUIT BREAKER OF GREATER AMPERAGE OR A PIECE OF WIRE. LOCATE AND REPAIR SHORT CIRCUIT TO CORRECT PROBLEM.

a. Main Circuit Breaker

Refer to Figure **[3-4]**. The main circuit breaker is located in the vehicle engine/battery compartment and is designed to interrupt electrical power to the lift's electrical system in case of a short circuit. In case of a short circuit, the circuit breaker reset tab will "pop-down". If pressing the reset tab UP and releasing does not reset/restore power, **DO NOT** press and hold. Contact an authorized Ricon dealer for repair.

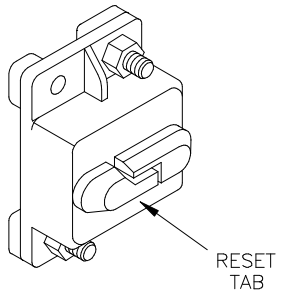

FIGURE [3-4]: MAIN CIRCUIT BREAKER

b. Control System Circuit Breaker

Refer to Figure **[3-5]**. The control system circuit breaker is found on the hydraulic pump assembly. In case of a control system short circuit, the circuit breaker button will "pop-out". If pressing and releasing the button does not reset/restore power, **DO NOT** press and hold. Contact an authorized Ricon dealer for repair.

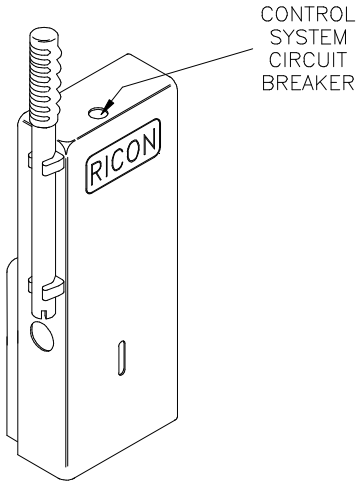

FIGURE [3-5]: CONTROL SYSTEM CIRCUIT BREAKER

3. MANUAL BACKUP PUMP

Refer to Figure **[3-6]**. The manual backup pump is used to operate the lift if there is no electrical power (the manual backup pump is shown within the standard pump enclosure). The controls for the pump consist of the pump handle extension (installed by the vehicle manufacturer near the pump or stored within the optional pump enclosure cover) for raising the lift platform and the pump release valve for lowering.

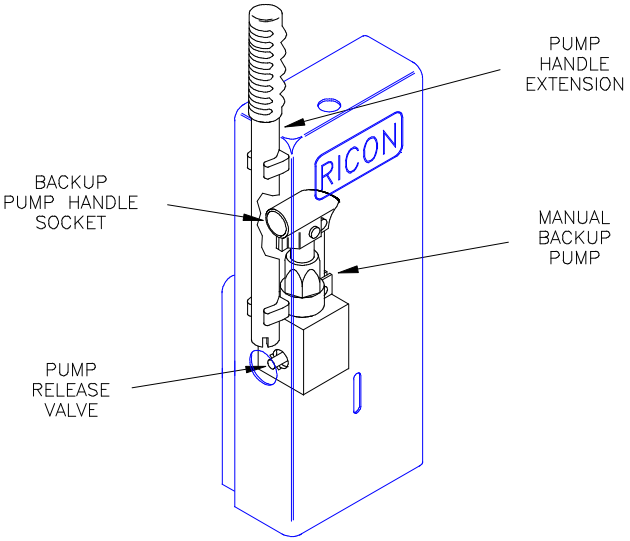

FIGURE [3-6]: STANDARD PUMP ENCLOSURE

a. To Raise Platform Manually

Refer to Figure **[3-7]**. To raise the platform manually, insert the pump handle extension onto the pump release valve. Make sure the notches at the end of the handle are fully engaged by the release valve pin. Twist the handle CLOCKWISE until lightly-snug to make sure that the pump is in the “raise mode”. Insert the handle extension into pump handle socket and move the handle extension UP and DOWN to raise the platform.

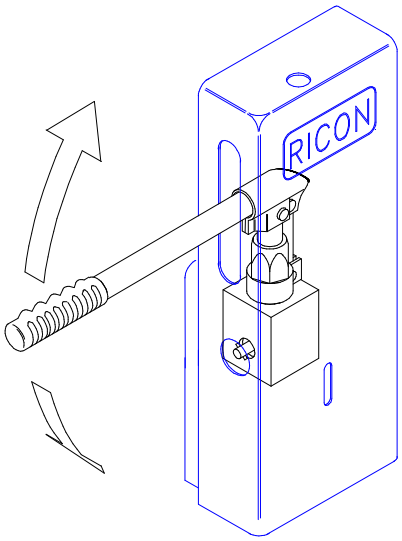

FIGURE [3-7]: PLATFORM MANUAL RAISING

b. To Lower Platform Manually

⚠ CAUTION
DO NOT TURN PUMP RELEASE VALVE MORE THAN 1/4-TURN COUNTER-CLOCKWISE. THE VALVE IS TOTALLY REMOVABLE WHICH WILL DISABLE ALL AUTOMATIC AND MANUAL UP/DOWN FUNCTIONS.

Refer to Figure **[3-8]**. To lower the platform manually, insert the handle extension onto the pump release valve, and slowly twist the handle 1/4-turn COUNTER-CLOCKWISE until the platform begins to lower. Allow the platform to lower to the desired position, and tighten the valve until lightly snug.

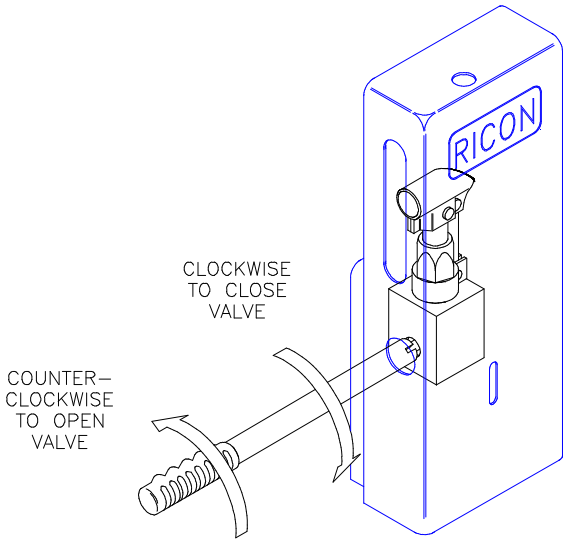

FIGURE [3-8]: PLATFORM MANUAL LOWERING

E. LIFT OPERATION

⚠ WARNINGS

1) IMPROPER USE OF THE LIFT CAN RESULT IN PERSONAL INJURY. USERS MUST READ AND FOLLOW OPERATING INSTRUCTIONS IN THE SERVICE/OWNER MANUAL. ADDITIONAL COPIES OF THE SERVICE/OWNER MANUAL ARE AVAILABLE FROM:

RICON CORP., 7900 NELSON RD. PANORAMA CITY, CA 91402
(800) 322-2884 OR (818) 237-3000

2) DO NOT EXCEED THE RATED LOAD CAPACITY OF 660 POUNDS (300 KG).

3) PRIOR TO USE, INSPECT THE WHEELCHAIR LIFT FOR PROPER FUNCTION, REQUIRED MAINTENANCE, OR DAMAGE. IF A PROBLEM EXISTS, DO NOT USE LIFT AND RETURN LIFT TO AN AUTHORIZED SERVICE AGENT FOR REPAIR.

4) THIS LIFT IS DESIGNED FOR USE BY WHEELCHAIR AND STANDEE OCCUPANTS ONLY.

RICON CORP. DISCLAIMS LIABILITY FOR DAMAGE OR PERSONAL INJURY RESULTING FROM MODIFICATION TO THE LIFT, LACK OF MAINTENANCE AND/OR REPAIR, NEGLIGENCE, ABUSE, OR FAILURE TO FOLLOW LIFT OPERATING INSTRUCTIONS.

- Before operating lift, be certain vehicle is safely parked on a level area away from traffic with the emergency brake ON. Allow enough space for lift operation and passenger boarding.

- Take special care to ensure that the area is clear of obstacles and open vehicle door(s) completely before deploying the lift.

⚠ CAUTION

ATTENDANT SHOULD **ALWAYS** REMAIN NEAR PASSENGER TO RENDER IMMEDIATE ASSISTANCE IF NECESSARY. KEEP OTHERS CLEAR OF LIFT WHEN OPERATING. MAINTAIN PRESSURE ON SWITCH UNTIL FUNCTION IS COMPLETE. BE CERTAIN WHEELCHAIR FITS PROPERLY ON PLATFORM AND DOES NOT CONTACT ROLLSTOP AND PREVENT IT FROM LOCKING AS THE PLATFORM RISES.

For lift operation refer to Figures **[3-9]** and **[3-10]** and the following sections:

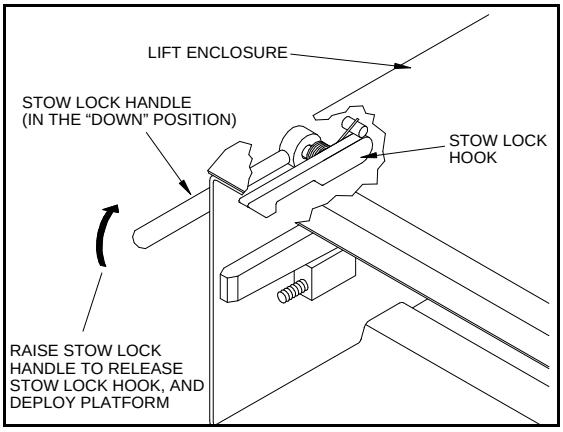

FIGURE [3-9]: STOW LOCK HANDLE

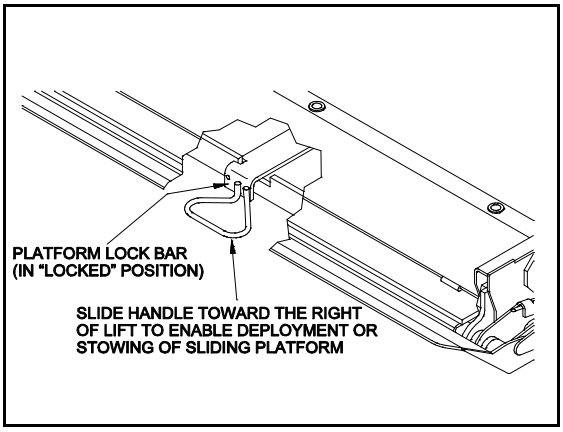
PLATFORM LOCK BAR
(IN "LOCKED" POSITION)
SLIDE HANDLE TOWARD THE RIGHT
OF LIFT TO ENABLE DEPLOYMENT OR
STOWING OF SLIDING PLATFORM

FIGURE [3-10]: PLATFORM LOCK BAR

1. TO ENTER VEHICLE

OPEN OPTIONAL COVER: If equipped with lift cover, unlatch and open cover.

DEPLOY LIFT: Raise STOW LOCK HANDLE then pull lift OUTWARD to its fully deployed position.

RAISE HANDRAILS: Raise RIGHT handrail until handrail lock engages then raise LEFT handrail until handrail lock engages.

RAISE PLATFORM SLIGHTLY: Press and hold /UP switch until platform raises at least 1-inch.

PULL-OUT SLIDING PLATFORM SECTION: Position PLATFORM LOCK HANDLE to RIGHT and pull sliding platform OUTWARD until it locks.

LOWER PLATFORM: Press and hold /DOWN switch until platform reaches ground level and rollstop opens completely.

BOARD PLATFORM: Position wheelchair, facing outward if possible, in center of platform and LOCK WHEELCHAIR BRAKES.

- STANDEES should stand in center of platform, facing direction of travel (toward vehicle), and firmly grasp handrails.

RAISE PLATFORM: Press and hold /UP switch until platform stops at vehicle floor level.

EXIT PLATFORM: CAREFULLY exit platform.

STOW LIFT: Refer to Section 3 below.

2. TO EXIT VEHICLE

OPEN OPTIONAL COVER: If equipped with lift cover, unlatch and open cover.

DEPLOY LIFT: Raise STOW LOCK HANDLE then pull lift OUTWARD to its fully deployed position.

RAISE HANDRAILS: Raise RIGHT handrail until handrail lock engages then raise LEFT handrail until handrail lock engages.

RAISE PLATFORM SLIGHTLY: Press and hold /UP switch until platform raises at least 1-inch.

PULL-OUT SLIDING PLATFORM SECTION: Position PLATFORM LOCK HANDLE to RIGHT and pull sliding platform OUTWARD until it locks.

RAISE PLATFORM: Press and hold /UP switch until platform stops at the proper vehicle floor level.

BOARD PLATFORM: Position wheelchair, facing outward if possible, in center of platform and LOCK WHEELCHAIR BRAKES.

- STANDEES should stand in center of platform, facing direction of travel (away from vehicle), and firmly grasp handrails.

LOWER PLATFORM: Press and hold /DOWN switch until platform reaches ground level and the rollstop opens completely.

EXIT PLATFORM: CAREFULLY exit platform.

STOW LIFT: Refer to Section 3 below.

3. TO STOW LIFT

POSITION PLATFORM SLIGHTLY: From vehicle floor level, press and hold /DOWN switch,

or from ground level press and hold /UP switch, until platform lowers or raises at least 1-inch.

PUSH-IN SLIDING PLATFORM SECTION: Position PLATFORM LOCK HANDLE to RIGHT, raise platform slightly, and push sliding platform INWARD until it locks.

POSITION PLATFORM TO STOW LEVEL: Press and hold /DOWN *or* /UP switch, until platform is positioned at stow level.

LOWER HANDRAILS: Release and lower LEFT handrail into stowed position then release and lower RIGHT handrail.

STOW LIFT: Refer to Figure **[3-11]**. Lower DEPLOY LOCK HANDLE and push lift INWARD until completely inside enclosure. Make sure STOW LOCK HANDLE is in DOWN position.

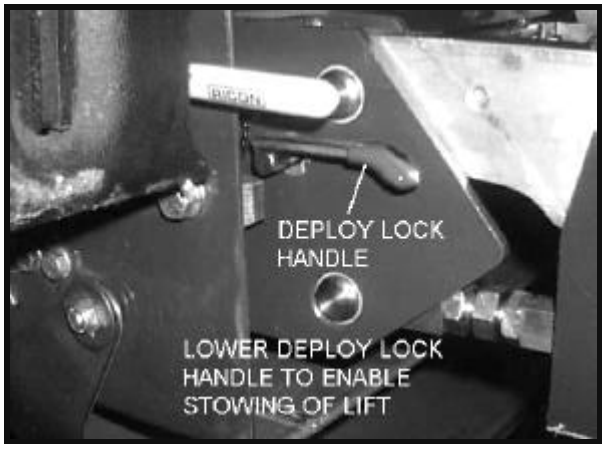

FIGURE [3-11]: DEPLOY LOCK HANDLE

CLOSE OPTIONAL COVER: If equipped with lift cover, close and latch cover.

4. MANUAL OPERATION

The manual backup pump is used to operate the lift if there is no electrical power. The controls for the pump consist of the pump handle extension for raising the lift platform and the pump release valve for lowering. In the event the lift becomes inoperable under its electrical power, it can be operated manually as follows:

⚠ CAUTION

DO NOT TURN PUMP RELEASE VALVE MORE THAN 1/4-TURN COUNTER-CLOCKWISE. THE VALVE IS TOTALLY REMOVABLE WHICH WOULD DISABLE ALL AUTOMATIC AND MANUAL UP/DOWN FUNCTIONS.

a. To Manually Deploy the Lift

- If equipped with optional lift cover, unlatch and open cover.
- At left-side of lift enclosure, raise stow lock handle UPWARD, then pull platform OUTWARD to its fully deployed position.
- Raise RIGHT handrail until handrail lock engages then raise LEFT handrail until handrail lock engages.
- Insert handle extension into backup pump handle socket and move pump handle in an UP/DOWN motion to raise platform at least 1-inch.
- At front of lift, position PLATFORM LOCK HANDLE to RIGHT and pull sliding platform

OUTWARD until it locks.

b. To Manually Lower or Raise the Platform

- To lower lift, insert pump handle extension onto backup pump release valve. Make sure notches at end of handle are fully engaged by release valve pin. Slowly twist handle 1/4-turn COUNTER-CLOCKWISE until lift platform begins to lower, allow platform to reach stow level or ground level, then turn handle extension CLOCKWISE to close valve.

- To raise lift, insert handle extension into backup pump handle socket and move pump handle in an UP/DOWN motion to raise platform to stow level or vehicle floor level.

c. To Manually Stow the Lift

- Using backup pump, manually raise or lower platform to about 1-inch above stow level.

- At front of lift, position PLATFORM LOCK HANDLE to RIGHT and push sliding platform INWARD until it locks.

- Insert pump handle extension onto manual backup pump release valve. Make sure notches at end of handle are fully engaged by release valve pin. Slowly twist handle 1/4-turn COUNTER-CLOCKWISE until lift platform begins to lower, allow platform to stop at stow level, then turn handle extension CLOCKWISE to close valve.

- Release and lower LEFT handrail into stowed position then release and lower RIGHT handrail.

⚠ WARNING

TO PREVENT PINCHING FINGERS, PUSH PLATFORM INWARD USING AN OPEN, FLAT HAND AND EXTREME CAUTION.

- At left-side of lift enclosure, position deploy lock handle DOWN, then push platform INWARD to its fully stowed position.

- If equipped with optional lift cover, close and latch cover.

5. EMERGENCY STOW PROCEDURE

In the unlikely event there is a hydraulic system failure and the manual backup pump is inoperative, the lift may be stowed as follows by two or more able-bodied persons:

⚠ WARNING

MANUALLY STOWING OF THIS LIFT REQUIRES FORCES GREATER THAN **100 LBS**. DO NOT ATTEMPT TO MANUALLY STOW THE LIFT USING LESS THAN TWO PEOPLE.

⚠ WARNING

THE PLATFORM IS HEAVY AND SHOULD BE LIFTED WITH USING EXTREME CAUTION AND PROPER LIFTING TECHNIQUE:

ALWAYS LIFT WITH LEGS AND NOT THE BACK WHEN ATTEMPTING TO LIFT HEAVY OBJECTS.

- Using ONE PERSON ON EACH SIDE of platform, raise platform until rollstop closes and place temporary support block on each side of lifting frame.
- At front of lift, position PLATFORM LOCK HANDLE to RIGHT and push sliding platform INWARD until it locks.
- Using ONE PERSON ON EACH SIDE of platform, raise platform at least 1-inch above stow level and lower platform to stow level.
- Remove temporary support block.
- Release and lower LEFT handrail into stowed position then release and lower RIGHT handrail.

⚠ WARNING

TO PREVENT PINCHING FINGERS, PUSH PLATFORM INWARD USING AN OPEN, FLAT HAND AND EXTREME CAUTION.

- At left-side of lift enclosure, pull and hold manual release handle OUTWARD, then push platform INWARD to its fully stowed position.
- If equipped with optional lift cover, close and latch cover.

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IV. MAINTENANCE

Regular routine maintenance of the RICON Eclipse® F8000 (A) Series Export Use Wheelchair and Standee Lift is required to ensure its optimum performance and reduce the need for repairs. Maintenance inspections must be performed by an authorized Ricon dealer at least once every six months or sooner, depending on usage. Maintenance inspections are required at least every six (6) months and a thorough maintenance inspection should be performed at the service intervals referenced in Table **[4-1]**. Under conditions of excessive use (more than 10 cycles per day), service should be increased.

⚠WARNING
THIS RICON PRODUCT IS HIGHLY SPECIALIZED. MAINTENANCE AND REPAIRS MUST BE PERFORMED ONLY BY AN AUTHORIZED RICON DEALER USING ONLY RICON REPLACEMENT PARTS. MODIFYING OR FAILING TO PROPERLY MAINTAIN THIS PRODUCT WILL VOID THE WARRANTY AND MAY RESULT IN UNSAFE OPERATING CONDITIONS.

A. MAINTENANCE SCHEDULE

TABLE [4-1]: MAINTENANCE SCHEDULE

REF.	SERVICE POINT	DESCRIPTION
DAILY SAFETY CHECK (or @ 10 - 20 cycles of operations)		
1	General Appearance	- If any abnormal noises exist, notify an authorized dealer immediately. - Inspect underside of vehicle to ensure nothing is out of the ordinary.
2	Lift Mountings and Support Points	- Ensure that all lift mounting and support points are in proper order and free from damage. - Ensure that all mounting bolts are of appropriate grade and sufficiently tight.
3	Carriage Stops	- Ensure carriage stops fasten properly.
4	Main Lifting Pivots	- Ensure carriage/lifting frame/platform pivot pins are installed properly, free from damage and locked in position with proper fasteners.
5	Platform and Platform Attachment Points	- Ensure platform operates properly during lift UP/DOWN functions without obstruction(s). - Ensure that all welds on carriage brackets, lifting frame and platform mounting brackets are in proper order. - Ensure that platform mounting brackets are properly fastened to both sides of the platform with the appropriate bolts.
6	Bridge Plate and Bridge Plate Operation	- Ensure that bridge plate functions properly during lift UP/DOWN operations without obstruction(s). - Ensure that the bridgeplate deploys fully as the platform stops at the proper vehicle floor level.
7	Rollstop and Rollstop Operation	- Ensure that rollstop operates properly on contact with the ground. - Ensure that rollstop opens, closes and locks properly without obstruction(s). - Ensure that rollstop return springs are in proper order.
8	Handrail and Handrail attachment	- Ensure that all fasteners are present and properly tightened. - Ensure that latch and load springs function properly.
BI-WEEKLY SAFETY CHECK (or @ 140 - 180 cycles of operation)		

TABLE [4-1]: MAINTENANCE SCHEDULE		
REF.	**SERVICE POINT**	**DESCRIPTION**
1	Labeling, Decals, and Cleaning	- Ensure that the Rated Load Capacity decal is affixed properly, clearly visible and legible. Replace if necessary. - Ensure that all Operating Instruction decals are affixed properly, clearly visible and legible. Replace if necessary. - Ensure that serial number is clearly marked, legible and visible. - After washing vehicle, spray lubricant, such as Curtisol Red Grease #88167, on all carriage/lifting frame/platform/rollstop pivot points, and rub down all surfaces with oil to avoid rusting of material.
THREE MONTH SAFETY CHECK (or @ 900 - 1000 cycles of operation)		
1	Rollstop Pivot Points	- Spray lubricant, such as Curtisol Red Grease #88167, on rollstop pivot points. Wipe clean any excess grease from targeted areas and surrounding areas.
2	Platform Guides and Bridgeplate Pivot Points.	- Spray lubricant, such as Curtisol Red Grease #88167, on sliding platform guide rails and bridgeplate pivot points. Wipe clean any excess grease from targeted areas and surrounding areas.
3	Hydraulic Fluid Level	- Ensure that the hydraulic fluid level is maintained at the required "full" level. Add only Texaco No. 15 aircraft hydraulic fluid (or equivalent U.S. mil spec H5606E oil).
ANNUAL SAFETY CHECK (or @ 3600 - 4000 cycles of operation)		
1	Hydraulic Pump Unit	- Extract, refill, extract again, and refill the Hydraulic Unit Reservoir to the required "full" line using Texaco #15 hydraulic fluid. Add only Texaco No. 15 aircraft hydraulic fluid (or equivalent U.S. mil spec H5606E oil).
2	Hydraulic Cylinder/Flow Control Valve/Hoses, Lines and Seals	If hydraulic fluid is low, inspect the following for evidence of leaks: - Hydraulic Cylinder and Flow Control Valve. - Ensure that hydraulic hoses are not damaged. - Ensure that all seals are seated properly and all fittings are tightly secured.
*RICON CORP. strongly recommends that this lift be refit after five years of use.		
END OF TABLE		

B. TROUBLESHOOTING GUIDES

The troubleshooting guides are designed to provide a logical starting point to locate general problems that could occur with the lift. However, not all possible problems or combinations of problems are listed. The troubleshooting guides do not incorporate routine safety precautions or preliminary procedures and assume that the vehicle battery is fully charged and the battery terminals/connectors are clean and tight. Refer to the following sections:

1. LIFT TROUBLESHOOTING GUIDE

For the lift troubleshooting guide, refer to Table **[4-2]**:

⚠ WARNING
THE TROUBLESHOOTING GUIDE DOES NOT INCORPORATE ROUTINE SAFETY PRECAUTIONS OR PRELIMINARY PROCEDURES. ONLY AUTHORIZED RICON DEALERS SHOULD PERFORM TROUBLESHOOTING.

TABLE [4-2]: TROUBLESHOOTING GUIDE

FUNCTION	SYMPTOM	POSSIBLE CAUSE	REMEDY
Deploy Lift	Rollstop does not Deploy fully.	Lift too high off the ground due to vehicle position, sloping ground surface.	Make sure that vehicle is parked on level surface.
	Sliding platform will not deploy.	Platform resting on stow level studs.	Raise platform with Control Pendant approximately 1".
		Platform lock bar not released.	Release lock bar and pull platform to its full extension.
Lower Platform	Platform does not lower when DOWN button is pressed.	Hydraulic hose not properly connected to hydraulic cylinder.	Verify proper connection of hydraulic hose to hydraulic cylinder (hydraulic Quick-Connect).
		Down Solenoid Valve electrical connector not connected properly.	Verify proper connection of Down Solenoid Valve electrical connector.
		UP/DOWN switch failure.	Verify proper electrical operation of UP/DOWN switch. Replace if required.
		Obstruction of Flow Control Valve.	Flush Hydraulic system.
		Down Solenoid Valve (DWNSV) failure.	Replace Down Solenoid Valve (DWNSV).
	Platform does not lower manually.	Hydraulic hose not properly connected to hydraulic cylinder.	Verify proper connection of hydraulic hose to hydraulic cylinder (hydraulic Quick-Connect).
		Obstruction of Flow Control Valve.	Flush Hydraulic system.

TABLE [4-2]: TROUBLESHOOTING GUIDE			
FUNCTION	**SYMPTOM**	**POSSIBLE CAUSE**	**REMEDY**
Raise Platform	Platform does not raise when UP button is pressed. No pump motor spin noise is emitted by Hydraulic Pump Unit.	Hydraulic Pump Motor electrical connectors not connected properly.	Verify proper connection of Hydraulic Pump Motor electrical connectors.
		RAISE/LOWER switch failure.	Replace RAISE/LOWER switch.
		Pump Contractor (CRPMP) failure.	Replace Pump Contractor (CRPMP).
		Hydraulic Manual Release Valve is open.	Close Manual Release Valve fully.
		Hydraulic hose not properly connected to hydraulic cylinder.	Verify proper connection of hydraulic hose to cylinder (hydraulic Quick-Connect).
		Obstruction of Flow Control Valve.	Flush hydraulic system.
		Down Solenoid Valve failure.	Replace Down Solenoid Valve.
		Contamination of Hydraulic Manual Back-Up Pump.	Flush hydraulic system.
		Hydraulic Pump failure.	Replace Hydraulic Pump unit.
	Platform does raise when UP button is pressed, but immed-iately starts to lower after UP button is released.	Hydraulic Manual Release Valve is partially open.	Close Manual Release Valve.
		Down Solenoid Valve failure.	Replace Down Solenoid Valve.
		Contamination of Hydraulic Manual Back-up Pump.	Flush hydraulic system.
		Hydraulic Pump Unit failure.	Replace Hydraulic Pump unit.
Deploy	Lift will not deploy.	Manual release handle is not disengaging.	Lift may be stowed too high. Re-adjust stow level.
		Lift will not pull out and manual release handle disengages.	Lift may not be resting on stow level studs. Raise Lift enough to deploy.
	Lift does not stow.	Deploy Lock Handle will not disengage.	Check for obstructions and ensure that there is nothing forcing the lift in while unlocking the Deploy Lock.
END OF TABLE			

2. LIFT OPERATIONAL TROUBLESHOOTING

For the lift operational troubleshooting guide, refer to Table **[4-3]**:

TABLE [4-3]: OPERATIONAL TROUBLESHOOTING GUIDE

SYMPTOM		POSSIBLE CAUSE	REMEDY
ROLLSTOP DOES NOT OPEN		Obstruction of rollstop release latch.	Raise lift and remove obstruction.
NO LIFT OPERATION		Control System Circuit Breaker tripped.	Reset circuit breaker.
		Main Circuit Breaker tripped.	Reset circuit breaker.
IN OR OUT FUNCTIONS	Abnormal Operation.	Obstruction in lift carriage.	Remove obstruction and check for any damage
	No Operation.	Control System Circuit Breaker tripped.	Reset circuit breaker.
		Main Motor Circuit Breaker tripped.	Reset circuit breaker.
UP OR DOWN FUNCTIONS	Abnormal Operation.	Obstruction in lifting frame.	Remove obstruction and check for any damage
		Backup pump manual release valve OPEN.	Turn manual release valve CLOCKWISE until lightly-snug.
	No Operation.	Control System Circuit Breaker tripped.	Reset circuit breaker.
		Backup pump manual release valve OPEN.	Turn manual release valve CLOCKWISE until lightly-snug.
		Hydraulic hose or fitting leak.	Contact an authorized Ricon dealer for repair.
MANUAL FUNCTIONS	Abnormal Operation.	Obstruction in lifting frame.	Remove obstruction and check for any damage
		Backup pump manual release valve OPEN.	Turn manual release valve CLOCKWISE until lightly-snug.
	No Operation.	Backup pump manual release valve OPEN.	Turn manual release valve CLOCKWISE until lightly-snug.
		Hydraulic hose or fitting leak.	Contact an authorized Ricon dealer for repair.

END OF TABLE

C. POWER CUT-OFF INTERLOCK INDICATOR DIAGNOSTICS

The purpose of an interlock system is to interfere with the operation of the lift if an unsafe condition is present. When interlock systems are added to the lift, the light is an indication whether or not the interlock is operating properly. The light is placed within the electrical system so that no matter which interlock system/method is used, the light will be ON when the interlock allows operation of the lift and OFF when the interlock has disabled the lift. When there is no interlock system installed, the light stays illuminated.

On all lift assemblies *without* the optional door operator, there is a light-assembly installed in the position where the door operator circuit breaker would normally be mounted. The light indicates when power is being supplied to the signal portion of the electrical system. The light will aid in diagnosing electrical problems. Refer to Table **[4-4]**:

TABLE [4-4]: INTERLOCK INDICATOR TROUBLESHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE
Light is not lit, lift does not operate.	Control system circuit breaker is tripped.
Light is not lit, lift operates.	Light needs to be replaced.
Light is lit, lift does not operate.	If there is a problem with the lift electrical system, check the power and/or the signal circuitry. Both may have to be checked, but check the power circuitry first.

END OF TABLE

D. ELECTRICAL WIRING DIAGRAMS

For the definitions of the electrical diagrams, refer to the following paragraphs:

1. Color Codes

   For the definitions of the standard wire color codes, refer to Table **[4-5]**:

TABLE [4-5]: COLOR CODE DEFINITIONS

LETTER	COLOR	LETTER	COLOR
BK	Black	R	Red
BL	Blue	VI	Violet
BR	Brown	VI/BK	Violet w/ Black
GN	Green	W	White
GN/BK	Green w/ Black	W/O	White w/ Orange
O	Orange	Y	Yellow
O/BK	Orange w/ Black	Y/BK	Yellow w/ Black

END OF TABLE

2. Connectors

Refer to Figure **[4-1]**. The standard electrical connectors used by Ricon are Molex® .062" Series. These connectors have terminal numbers stamped onto the rear. Use these numbers and colors to identify all wires.

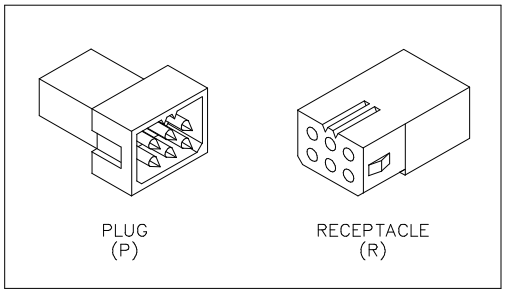

FIGURE [4-1]: MOLEX® CONNECTORS

3. Labels

For the definitions of the labels used on the wiring diagrams, refer to the list below:

12V	12 Volts Circuit current rating is also given.
UP	Pump Up
DWN	Down Valve

+VDC(rating)	Supply voltage (12 or 24 volt). Circuit rating is also given.
CRPMP	Pump Control Relay.
DWNSV	Down Solenoid Valve.
PMOT	Pump Motor.
U/D COM	Up and Down Common

4. Symbols

Figure **[4-2]** shows the standard symbology used in the electrical wiring diagrams. All symbols may or may not be used in all diagrams.

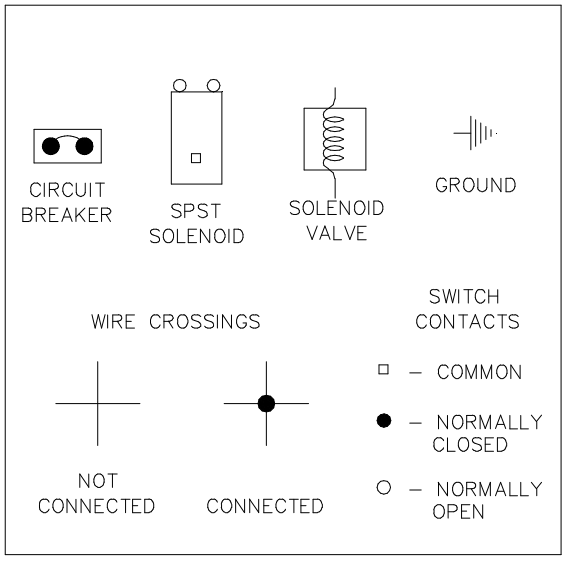

FIGURE [4-2]: ELECTRICAL DIAGRAM SYMBOLS

5. Wiring Diagrams

For the lift electrical system wiring diagrams, refer to Figures **[4-3]** and **[4-4]** on the following pages:

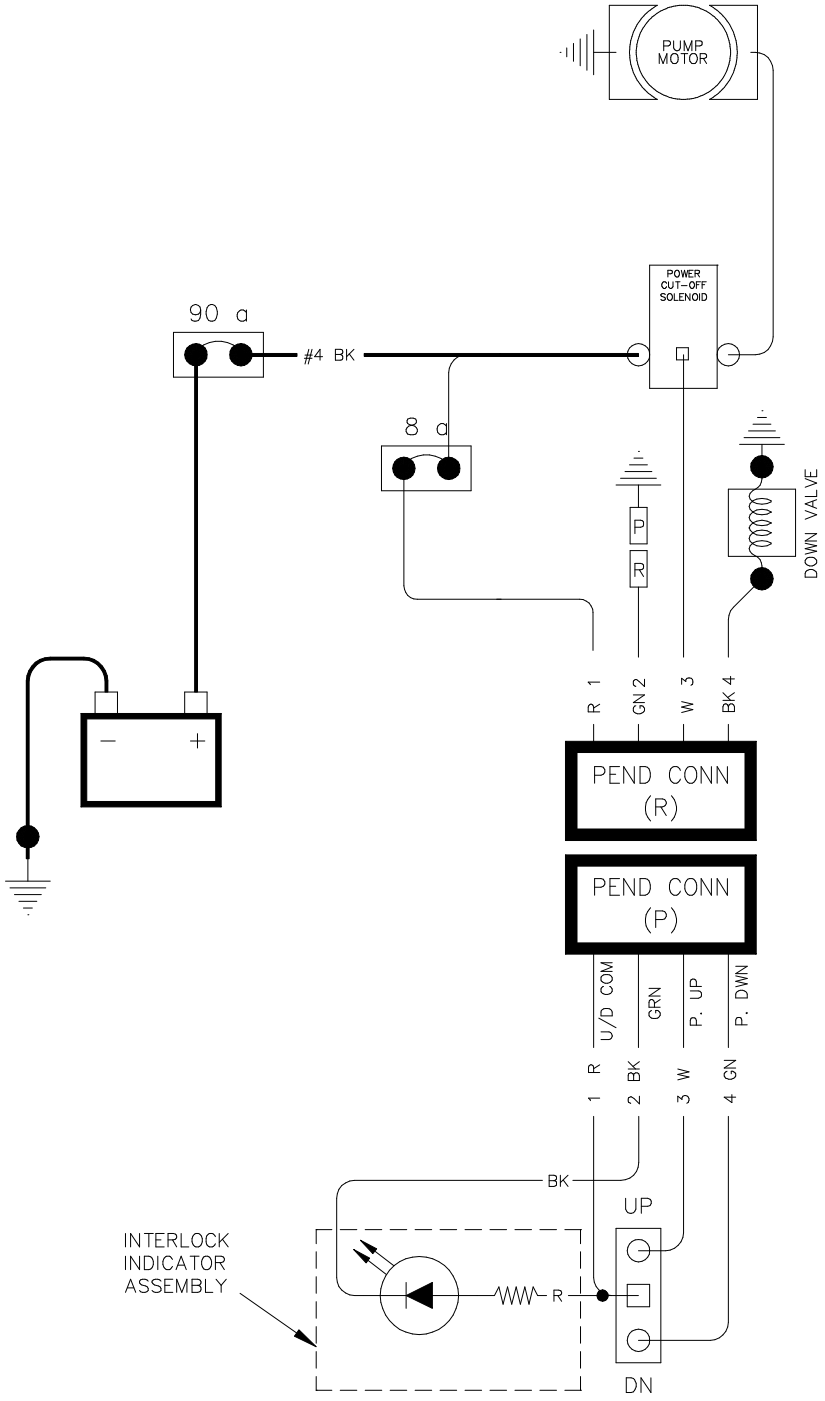

FIGURE [4-3]: WIRING DIAGRAM W/STANDARD PUMP ENCLOSURE

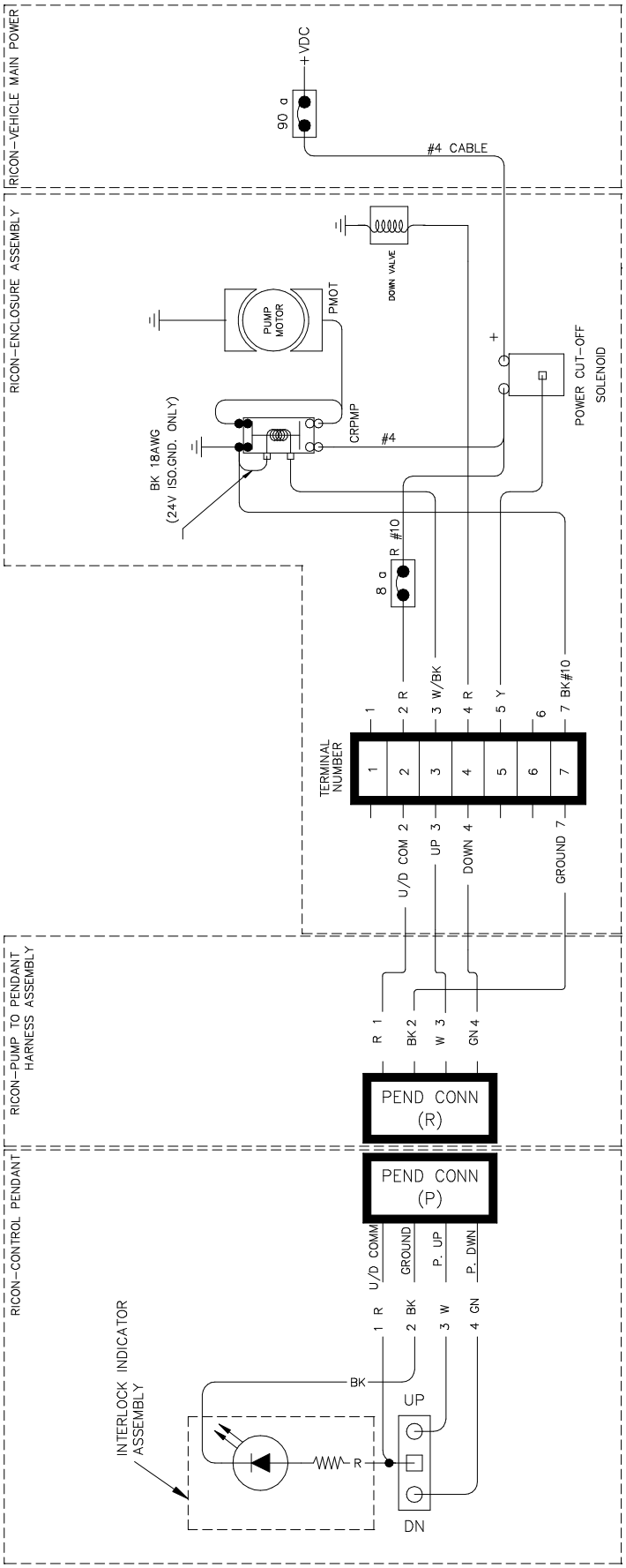

FIGURE [4-4]: WIRING DIAGRAM W/OPTIONAL PUMP ENCLOSURE

E. HYDRAULIC POWER UNIT FLUID FLUSH AND RENEWAL

1. Fully deploy the lift.

2. Slowly open the manual release valve to release the hydraulic pressure and lower platform to ground level.

3. Loosen clamp fastening the tank to the pump.

4. Carefully pull tank from the bottom of the pump, and empty the tank into a proper waste fluid container.

5. Reinstall tank onto the pump and tighten the tank clamp.

6. Remove the plug on the top of the tank. Fill the tank with new hydraulic fluid. Fill only with Texaco No. 15 aircraft hydraulic fluid (or equivalent U.S. mil spec H5606E/F oil).

7. Close manual release valve.

8. Using manual back-up pump, manually raise platform to vehicle floor level and lower platform to ground level. Repeat this cycle three times.

9. Slowly open the manual release valve to release the hydraulic pressure and lower platform to ground level.

10. Repeat steps **4** through **6** and proceed to step **11**.

11. Close manual release valve.

12. Refer to BLEEDING THE HYDRAULIC SYSTEM.

F. BLEEDING THE HYDRAULIC SYSTEM

The hydraulic system of the lift may have air introduced into the system. If air does enter the hydraulic system, the hydraulic system may appear to soften. This is most noticeable when (un)loading the platform at vehicle floor level. The air in the hydraulic system must then be removed. The following procedure to remove the air from the system is known as "bleeding".

NOTE: The following procedure can be messy and is most easily performed by two people.

1. Fully deploy the lift to groung level.

⚠ WARNINGS

- WEAR PROTECTIVE CLOTHING AND EYE PROTECTION AT ALL TIMES. BATTERIES CONTAIN ACID THAT CAN BURN. IF ACID COMES INTO CONTACT WITH SKIN, IMMEDIATELY FLUSH AFFECTED AREA WITH WATER AND WASH WITH SOAP.
- DO NOT SMOKE OR USE OPEN FLAME IN THE VICINITY OF BATTERY. ALWAYS WORK IN PROPERLY VENTILATED AREA.
- DO NOT LAY ANYTHING ON TOP OF A BATTERY.

2. At the vehicle battery/engine compartment, disconnect the cable from the battery positive (+) terminal.

3. Locate the air bleeder valve on the top side of the lift cylinder. Access to this valve is from underneath the lift.

4. Raise the platform to vehicle floor level.

5. Open the air bleeder valve with a screwdriver to let air and hydraulic fluid out of the cylinder.

   NOTE: This step will cause oil loss. Have dry rags on hand to clean-up spilled hydraulic fluid.

6. Close the air bleeder valve.

7. Lower the platform to ground level.

8. Remove the plug on the top of the hydraulic pump tank. Make sure that the hydraulic fluid in the tank is at the FULL level. Fill only with Texaco No. 15 aircraft hydraulic fluid (or equivalent U.S. mil spec H5606E/F oil) and reinstall the plug.

9. Repeat the previous FIVE steps until the fluid coming out of the air bleeder valve does not contain any air bubbles.

10. Verify that the air bleeder valve is fully closed.

⚠ WARNINGS
C WEAR PROTECTIVE CLOTHING AND EYE PROTECTION AT ALL TIMES. BATTERIES CONTAIN ACID THAT CAN BURN. IF ACID COMES INTO CONTACT WITH SKIN, IMMEDIATELY FLUSH AFFECTED AREA WITH WATER AND WASH WITH SOAP. C DO NOT SMOKE OR USE OPEN FLAME IN THE VICINITY OF BATTERY. ALWAYS WORK IN PROPERLY VENTILATED AREA. C DO NOT LAY ANYTHING ON TOP OF A BATTERY.

11. At the vehicle battery/engine compartment, connect the cable to the battery positive (+) terminal.

12. Remove the platform support and stow the lift.

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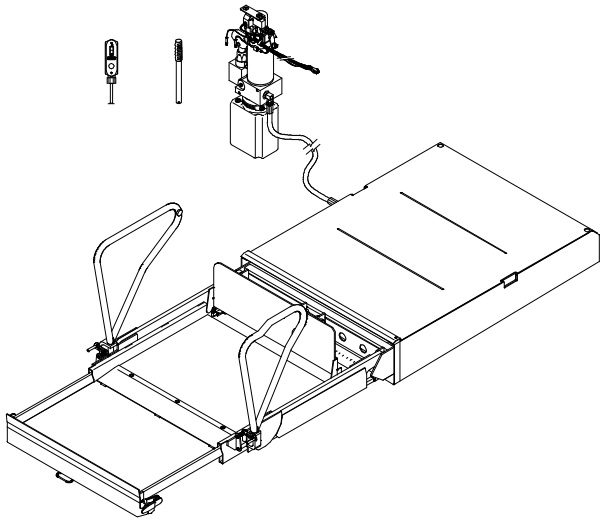
V. PARTS DIAGRAMS AND LISTS

This chapter contains parts diagrams and lists for the RICON Eclipse® F8000 (A) Series Export Use Wheelchair and Standee Lift. The parts diagrams are the 3D exploded view of the lift components with the individual components referenced by numbers. The accompanying parts list contains the part reference number, description, quantity used, and the Ricon stock number. For the part numbers of the lift decals, refer to Decal Locations and Part Numbers figure in Chapter **II** of this manual.



LIFT MODEL AND KIT NUMBERS	
PRODUCT NUMBER	F8000-E200A and F8000-E210A
DOCUMENTATION KIT NUMBER	01311
PRODUCTION DECAL SET NUMBER	01313
SPARE DECAL KIT NUMBER	26005

PARTS DIAGRAM **PAGE**

FIGURE [5-1]: MONARCH HYDRAULIC POWER UNIT 5-2

FIGURE [5-2]: PUMP INTERIOR (STANDARD ENCLOSURE) MOUNTING ASSEMBLY 5-4

FIGURE [5-3]: OPTIONAL PUMP ENCLOSURE ASSEMBLY 5-6

FIGURE [5-4]: LIFT ENCLOSURE ASSEMBLY 5-10

FIGURE [5-5]: PLATFORM ASSEMBLY 5-14

FIGURE [5-6]: TRAVELING FRAME ASSEMBLY 5-18

FIGURE [5-7]: CARRIAGE ASSEMBLY 5-20

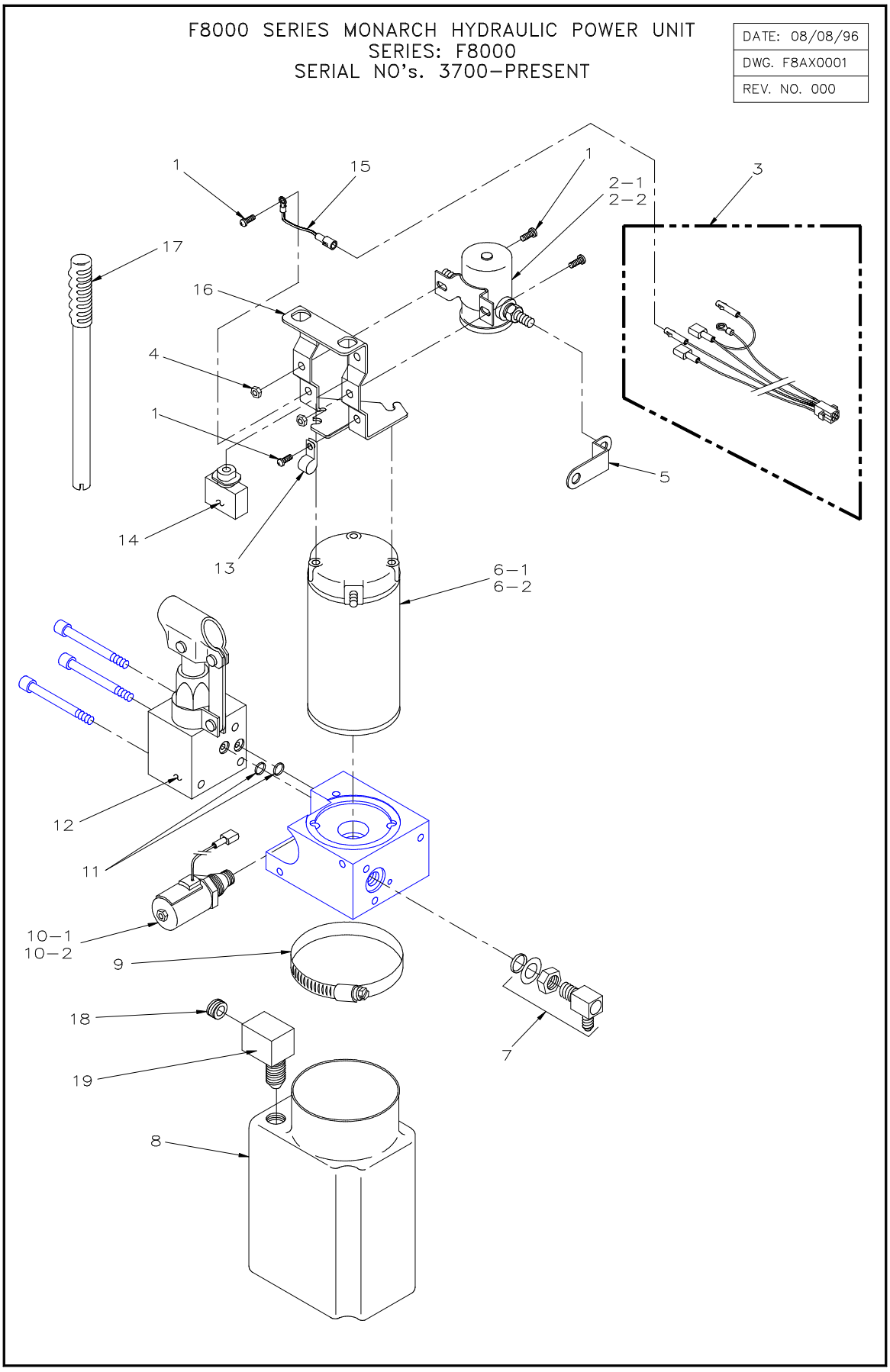


FIGURE [5-1]: MONARCH HYDRAULIC POWER UNIT

MONARCH HYDRAULIC POWER UNIT
F8000 SERIES (ALL MODELS) WHEELCHAIR LIFT
SERIAL NO's. 3700 and HIGHER

REF.	DESCRIPTION	QTY.	PART NO.
1	TRS-10-24 X 0.50 PAN PHIL, SELF THREAD	4	28111T
2-1	SOLENOID, SPST, 12V	1	26444
2-2	SOLENOID, SPST, 24V	1	26449
3	HARNESS, PUMP, COMMON TO S-SERIES/UV, 12V & 24V	1	V2-ES-100
4	NUT-10-24, HEX	2	28304
5	MOTOR, SOLENOID BUS BAR (SP SOLENOID)	1	V2-ES-030
6-1	MOTOR-ASSY.12V, 3", MONARCH PUMP	1	V2-SH-115
6-2	MOTOR-ASSY. 24V, 3", MONARCH PUMP	1	V2-SH-116
7	ADAPTER-L 7/16M 9/16M ORB/JIC 1.03 X 1.06	1	V2-SH-14
8	RESERVOIR-RICON POWER UNIT, PLASTIC	1	V2-SH-108
9	CLAMP-HOSE, 3.5 DIA.	1	V2-SH-109
10-1	HYDRAULIC-ASSY. POPPET VALVE, 12V DELTROL	1	V2-SH-105
10-2	HYDRAULIC-ASSY. POPPET VALVE, 24V DELTROL	1	V2-SH-136
11	0-RING, NITRILE, 0.301ID, 0.070 WIDTH	2	24011
12	BACK-UP PUMP- MANUAL WITH OUT HANDLE	1	V2-SH-110
13	CABLE CLAMP,3/8"	1	25516
14	CIRCUIT BREAKER-8AMP (RED)	1	265108
15	ELWO5900/26493/26533/26354	1	ELJ01060
16	BRACKET-SOLENOID MOUNTING	1	V2-SH-127
17	HANDLE-MANUAL BACK UP PUMP	1	V2-SH-111
18	PLUG-RESERVOIR, BREATHER FILLER	1	V2-SH-106
19	FITTING-STREET ELBOW, FEMALE LARGE	1	V2-SH-013

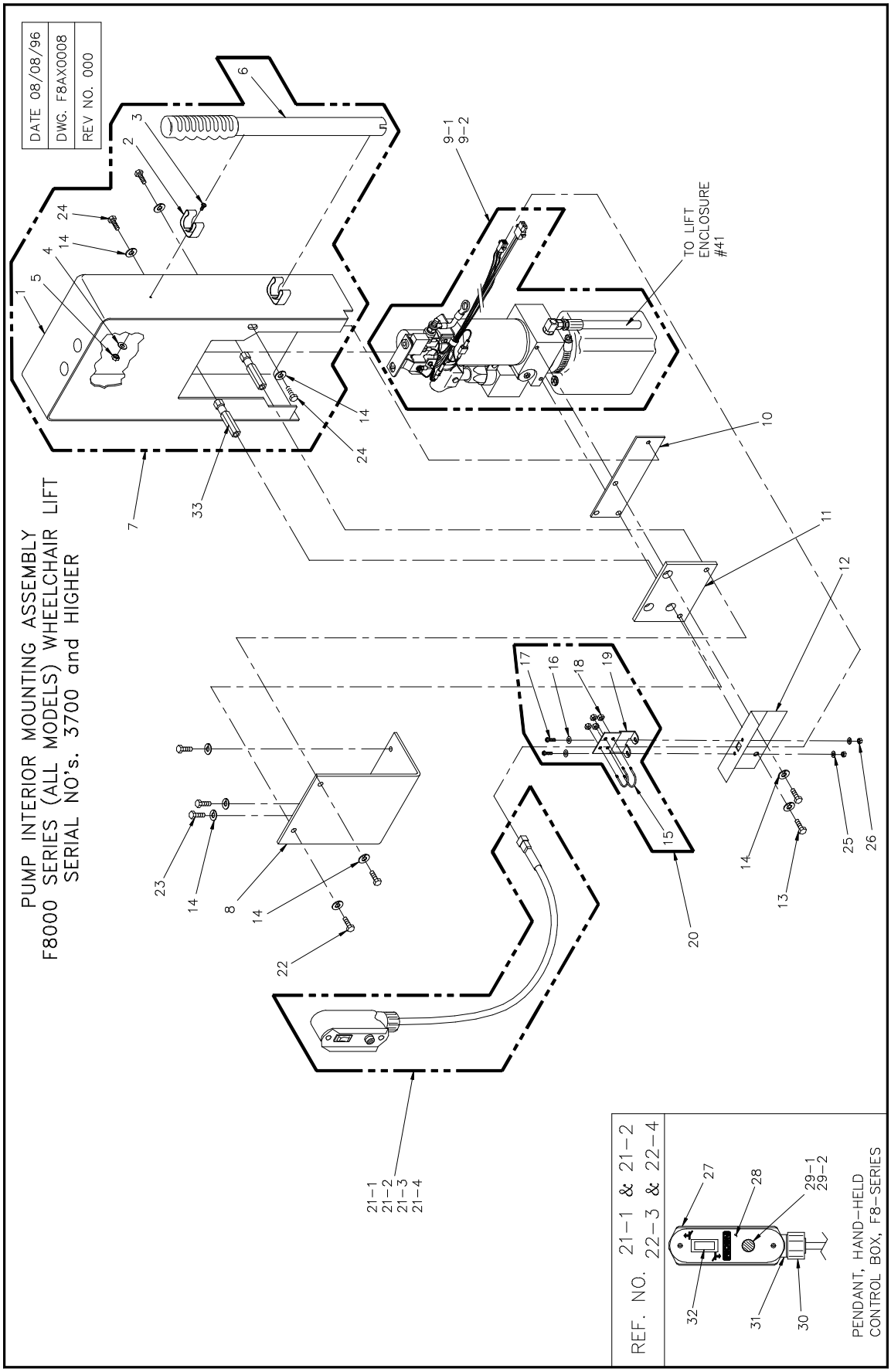


FIGURE [5-2]: PUMP INTERIOR (STANDARD ENCLOSURE) MOUNTING ASSEMBLY

PUMP INTERIOR MOUNTING ASSEMBLY
F8000 SERIES (ALL MODELS) WHEELCHAIR LIFT
SERIAL NO's. 3700 and HIGHER

REF.	DESCRIPTION	QTY.	PART NO
1	COVER-S-SERIES PUMP	1	V2-CV-020
2	CLIP-EMERGENCY TOOLS, LARGE	2	25543
3	MS-10-24 X 0.50 PANPHIL	2	28111
4	WASHER-#10 FLAT	2	28271
5	NUT-10-24 JAM	2	28304
6	HANDLE-MANUAL BACK UP PUMP	1	V2-SH-111
7	KIT-PUMP COVER	1	F8-A250
8	BRACKET-PUMP MOUNTING, VERTICAL	1	F8-P301
9-1	HYDRAULIC-ASSY. POWER UNIT, 12V ECLIPSE	1	PMP12110309
9-2	HYDRAULIC-ASSY. POWER UNIT, 24V ECLIPSE	1	PMP24110309
10	PLATE-PUMP COVER MOUNT	1	V2-AC-71
11	PLATE-PUMP MOUNT	1	V2-AC-70
12	BRACKET-STRAIN RELIEF PENDANT	1	F8-0254
13	CS-5/16-18 X 1.25 HEX GR5	2	282231
14	WASHER-5/16 SPLIT LOCK	10	28278
15	U-BOLT-10-24 X 0.50ID X 0.75L	2	28427
16	WASHER-#8 SPLIT LOCK	2	28253
17	MS-8-32 X 0.375 PAN PHIL	2	28069
18	NUT-10-24 NYLON	4	28305
19	BRACKET-U-BOLT, PENDANT STRAIN RELIEF	1	V2-ES-014
20	KIT-CONTROL HARNESS STRAIN RELIEF	1	01007
21-1	PENDANT-ASSY. SINGLE SWITCH, 12V	1	F8-0432
21-2	PENDANT-ASSY. SINGLE SWITCH, 24V	1	F8-0319
21-3	PENDANT-ASSY. SINGLE SWITCH, COIL CORD, 12V	1	F8-0433
21-4	PENDANT-ASSY. SINGLE SWITCH, COIL CORD, 24V	1	F8-0320
22	CS-5/16-18 X 0.625 HEX GR5.	2	282239
23	CS-5/16-18 X 1.75 HEX SST.	3	282176
24	CS-5/16-18 X 0.50 HEX GR5.	3	282157
25	WASHER-#8 FLAT	2	2826926
26	NUT-8-32 NYLON	2	28303
27	PLATE-PENDANT SWITCH, GUARD	1	UV-ES-102
28	PLATE-PENDANT FUNCTION, FACE ECLPISE	1	26272
29-1	LIGHT-LIFT ARMED INDICATOR, 12V	1	UL-ES-034
29-2	LIGHT-LIFT ARMED INDICATOR, 24V	1	V2-ES-016
30	CONNECTOR-PVC BOX	1	V2-ES-88
31	PVC BOX-WITH MALE CLIP.	1	V2-ES-85
32	SWITCH-SP,ROCKER (ON) OFF (ON), BLACK	1	26455
33	HEX, ROD-PUMP STANDOFF	2	V2-CV-015

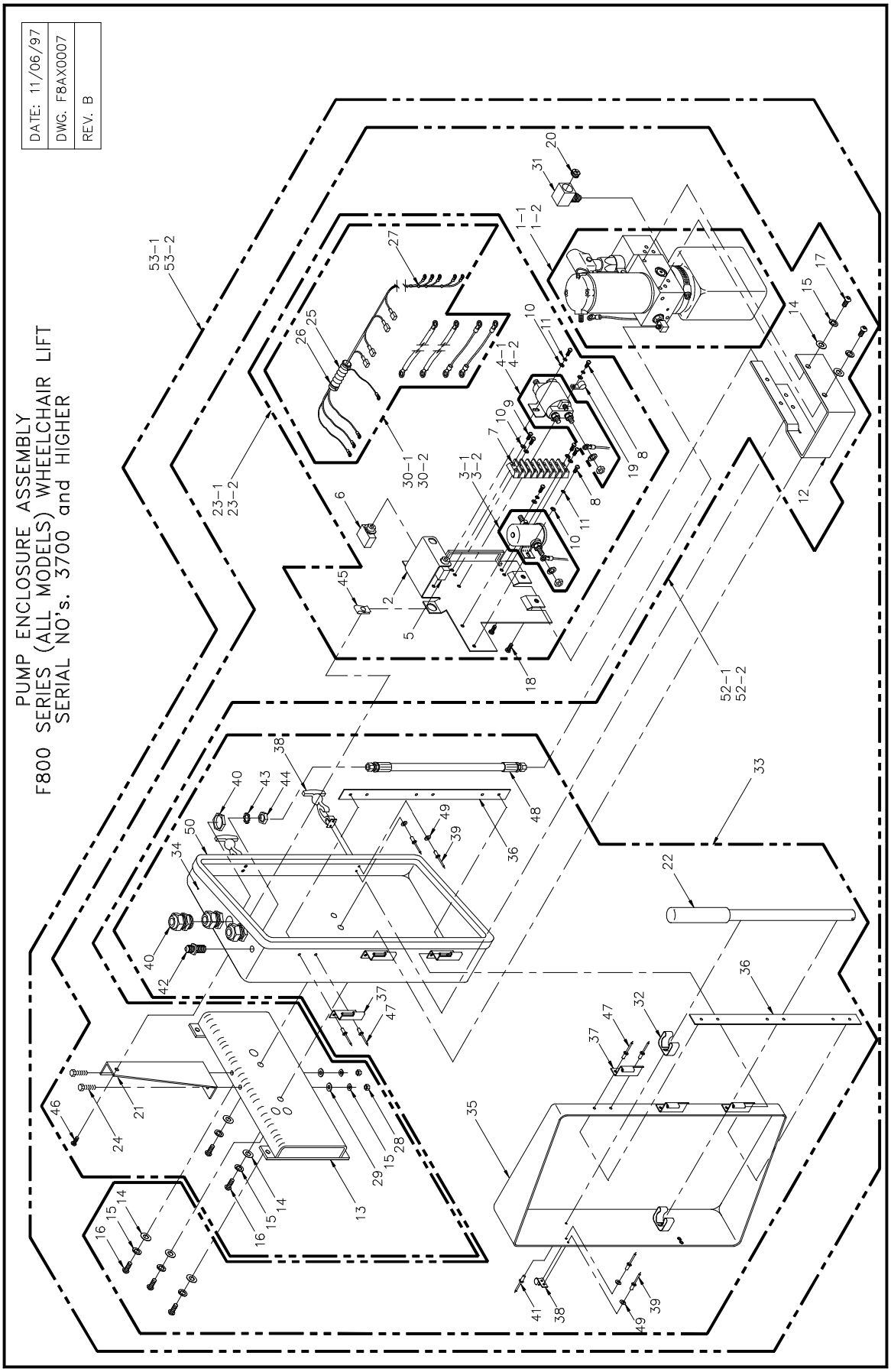


FIGURE [5-3]: OPTIONAL PUMP ENCLOSURE ASSEMBLY

PUMP ASSEMBLY
F8000 (A) SERIES (ALL MODELS) WHEELCHAIR LIFTS
SERIAL NO's. 3700 and HIGHER

REF.	DESCRIPTION	QTY.	PART NO.
1-1	PUMP, NO TOP, UV RES W/HORIZ, 2K PSI	1	PMP212003007
1-2	PUMP, NO TOP, UV RES W/HORIZ, 2K PSI	1	PMP224003007
2	PLATE-WASSY. SOLENOID	1	F9-0205
3-1	SOLENOID-SPST,12V	1	26444
3-2	SOLENOID, SP 24V ISOLATED GROUND	1	264492
4-1	SOLENOID-12V, DP LARGE	1	26447
4-2	SOLENOID-24V, DP LARGE ISOLATED GROUND	1	26450
5	CIRCUIT BREAKER-5AMP	1	26511
6	CIRCUIT BREAKER-30AMP	1	26510
7	TERMINAL STRIP, 10-18 GA, ALTECH	1	26566
8	MS-10-32 X 0.313 PAN PHIL SST.	4	28703
9	MS-10-32 X 0.75 PAN PHIL	4	28147
10	WASHER-#10 FLAT SST.	8	282715
11	WASHER-#10 SPLIT LOCK SST.	4	282725
12	BRACKET-PUMP MOUNTING	1	F9-0204
13	BRACKET-WASSY., PUMP MOUNTING	1	UV-PF-945
14	WASHER-0.32ID X 0.75OD X 0.08 SST.	7	282776
15	WASHER-5/16 SPLIT LOCK	11	282785
16	SCS-5/16-24 X 0.75 BTN. SKT. SST.	5	28702
17	SCS-5/16-18 X 0.75 BTN. SKT. SST.	2	282285
18	SCS-10-32 X 0.50 BTN. SKT. SST.	2	28156
19	CLAMP, CABLE-3/8"	1	25516
20	PLUG-RESERVOIR, BREATHER FILLER	1	V2-SH-106
21	BRACKET-STIFFENER	1	F9-0378
22	HANDLE-MANUAL BACKUP PUMP	1	VS-SH-111
23-1	SOLENOID PLATE-ASSY. 12VDC	1	F9-0243
23-2	SOLENOID PLATE-ASSY. 24VDC	1	F9-0246
24	CS-5/16-18 X 0.75 HEX SST.	2	282205
25	CONDUIT-1/2" PLASTIC	0.17	27200
26	CABLE TIE-5.5" (NAT)	2	25520
27	CABLE TIE-4.0" (NAT)	9	25519
28	NUT-5/16-18 NYLON SST.	2	283145
29	NUT-5/16-18 FLAT SST.	2	28630
30-1	HARNESS-ASSY., PUMP SOLENOID PLATE, 12V	1	F9-0358
30-2	HARNESS-ASSY., PUMP SOLENOID PLATE, 24V	1	F9-0370
31	FITTING-STREET ELBOW, FEMALE	1	V2-SH-013
32	CLIP-EMERGENCY TOOLS	2	25543
33	PUMP ENCLOSURE-ASSY.	1	F9-0371
34	BASE-PUMP ENCLOSURE	1	F9-0216
35	DOOR-PUMP ENCLOSURE	1	F9-0217
36	PLATE REINFORCEMENT-PUMP ENCLOSURE	2	F9-0255
37	HINGE-2.50 X 2.00 SST.	6	F9-0218
38	LATCH,DRAW-FLEXABLE T-HANDLE	2	25089
39	RIVET-1/8 X 3/8 BLIND AL.	8	14-30-302
40	STRAIN RELIEF-STRAIGHT THRU., LIQ. TIGHT	3	26284
41	RIVET-5/32 X 0.19-0.25 BLIND (ASD5-4)	2	28645
42	ADAPTER-STR. 7/16M 7/16M JIC/JIC BHD 2.08L	1	V2-SH-981
43	WASHER-7/16 EXTERNAL STAR SST.	1	282915
44	NUT-7/16-20 HEX PLATED JAM	1	14-10-107
45	SPRING NUT-1/4-20 SST.	1	283105

REF.	DESCRIPTION	QTY.	PART NO.
46	SCS-1/4-20 X 0.75 BTN. SKT. SST.	1	28198
47	RIVET-3/16 X 0.45 BLIND AL.	12	28704
48	HOSE-ASSY., 11" X 1/4 JIC X 1/4 JIC	1	F9-0333
49	WASHER-#8 FLAT	8	28269
50	SEAL,DOOR-7/16 X 53/64	5.33	26679
51	WASHER-1/4 FLAT SST.	1	282735
52-1	PUMP W/ BRACKETS, 12V	1	F9-0237
52-2	PUMP W/ BRACKETS, 24V	1	F9-0238
53-1	PUMP W/ ENCLOSURE, 12V	1	F9-0235
53-2	PUMP W/ ENCLOSURE, 24V	1	F9-0236

NOTES

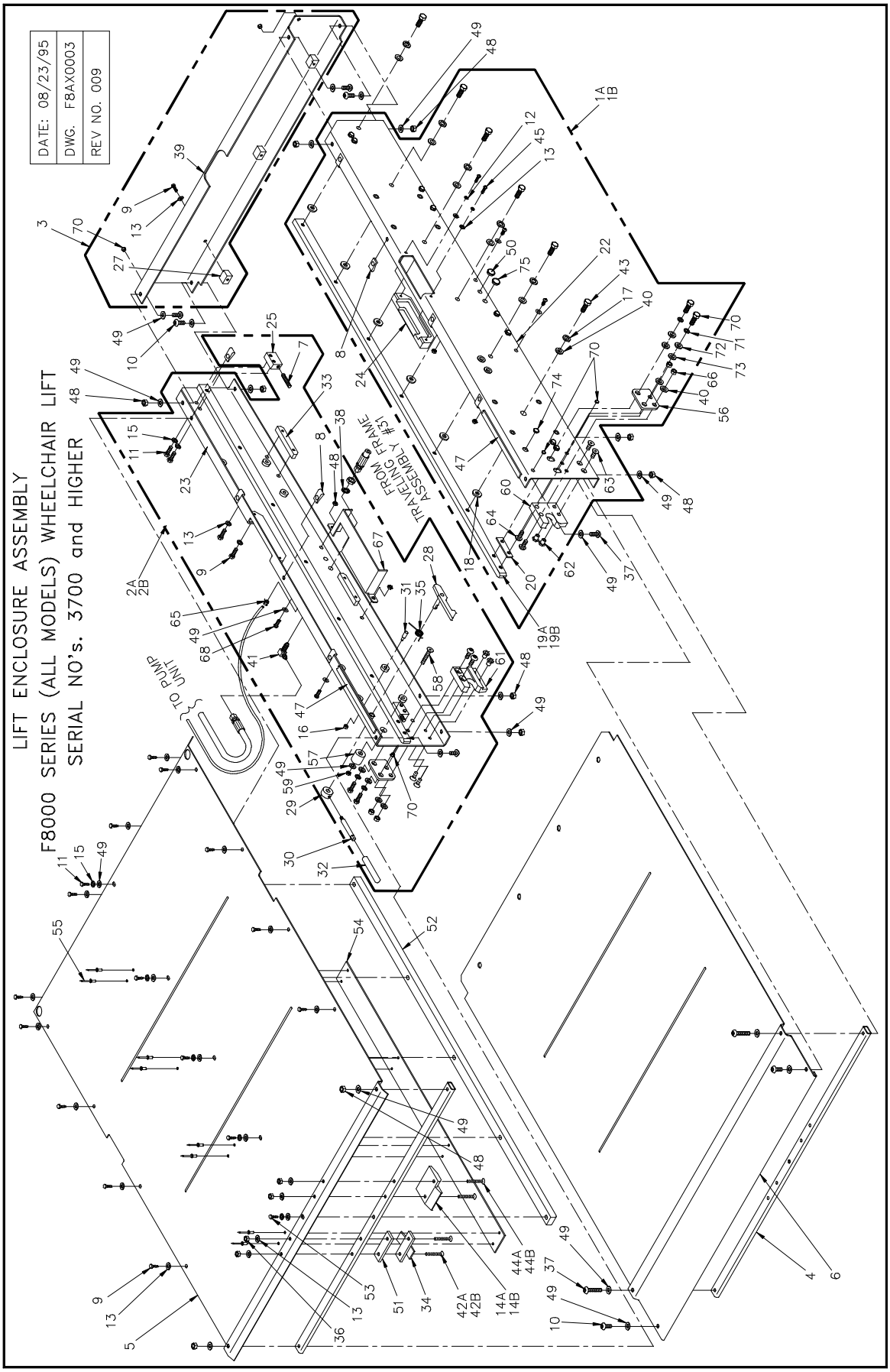


FIGURE [5-4]: LIFT ENCLOSURE ASSEMBLY

LIFT ENCLOSURE ASSEMBLY
F8000 SERIES (ALL MODELS) WHEELCHAIR LIFT
SERIAL NO's. 3700 and HIGHER

REF.	DESCRIPTION	QTY.	PART NO.
1A	CHANNEL-ASSY, MTG FRM, RH SL	1	F8-0372
1B	CHANNEL-ASSY, MTG FRM, RH ST	1	F8-0349
2A	CHANNEL-ASSY, MTG FRM, LH SL	1	F8-0373
2B	CHANNEL-ASSY, MTG FRM, LH ST	1	F8-0371
3	CHANNEL, MOUNTING FRAME, REAR, MECH. ASSY.	1	F8-0065
4	TUBE, COVER SUPPORT	2	F8-0101
5	COVER, TOP	1	F8-0374
6	COVER, BOTTOM	1	F8-0071
7	SCREW, SET, 3/8-16 X 1.25 CUP POINT NYLOCK	4	282461
8	NUT-SPRING, 1/4-20	8	283105
9	BOLT-HEX 1/4-20X5/8 GR5	23	28164
10	SOC BUTTON 5/16-18 X 0.75	6	282285
11	BOLT-HEX 5/16-18X3/4	12	28224
12	WASHER #10 SPLIT LOCK	4	282725
13	WASHER 1/4 FLAT SAE	27	28273
14A	BLOCK, BRIDGEPLATE GUIDE-ANGLED CARR.	1	F8-0388
14B	BLOCK, BRIDGEPLATE GUIDE	1	F8-0383
15	WASHER 5/16 SPLIT LOCK	8	28278
16	NUT-HEX 10-24 NYLON INSERT	1	28305
17	WASHER, 3/8 SPLIT LOCK	12	28280
18	BUSHING, SPACER, GUIDERAIL	12	F8-0006
19A	GUIDE RAIL, SLOPING	2	F8-0378
19B	GUIDE RAIL, 47.00 X 1.00 X 0.50	2	F8-0007
20	PLATE, SPACER, GUIDERAIL	2	F8-0344
22	CHANNEL-WELD ASSY, MTG FRM, RH	1	F8-0347
23	CHANNEL-WELD ASSY, MTG FRM, LH	1	F8-0348
24	RELIEF, MOUNTING FRAME	2	F8-0275
25	BLOCK, CARRIAGE STOP	4	F8-0082
27	BLOCK, RETAINING, BOTTOM COVER	3	F8-0161
28	HOOK, STOW LOCK, WELD ASSEMBLY	1	F8-0273
29	COLLAR-STOW LOCK HD	1	F8-0339
30	HANDLE-STOW LOCK HD	1	F8-0340
31	STOP PEG, STOW LOCK	1	F8-0173
32	CAP, VINYL YLW .375-2.5 IL HVY BLK LETTER	1	01653
33	BOTTOM COVER RETAINER	4	UV-MF-046
34	STRIKER, DEPLOY LOCK, WELD ASSY.	1	F8-0298
35	SPRING, STOW LOCK, 8.3	1	F8-0270
36	NUT-HEX 1/4-20 NYLON INSERT	4	28309
37	SOC BUTTON 5/16-18 X 1.25	4	282256
38	WASHER, 7/16 EXTERNAL STAR - SST	1	282915
39	CHANNEL, REAR, ASSEMBLY	1	F8-0251
40	WASHER 3/8 FLAT SAE	16	282835
41	FITTING, "L" 1/4 JIC BULK HEAD W/HEX NUT	1	V2-SH-98
42-1	MS 1/4-20 X 1-1/4 PHIL FLAT	2	28189
42-2 *	MS-SOC FLAT, 1/4-20 X 1.50	2	281846
43	BOLT-HEX 3/8-16 X 7/8 GR5	12	282345

* Hardware used for sloping track.
** For straight track only.

REF.	DESCRIPTION	QTY.	PART NO.
44-1	MS-SOC FLAT, 1/4-20 X 1.50	2	281846
44-2 *	MS 1/4-20 X 1 3/4 SLOT FLAT	2	28195
45	MS 10-24 X 3/4 PHIL PAN	4	28113
46	WASHER #10 FLAT SAE	4	28271
47	FOAM, RUBBER, BLK., 1/8 X 1/2 X 100FT, ADH	88"	06-06-107
48	NUT-HEX 5/16-18 NYLON INSERT	12	28314
49	WASHER 5/16 FLAT SAE	25	28277
50	PLUG - 0.625 DIA, 0.125 MTL. BLK PL.	2	26683
51 *	BAR, STRIKER, DEPLOY LOCK	1	F8-0184
52	RAIL, ALIGNMENT	1	F8-0127
53	CS-5/16-18-X 1.25 HEX GR5	1	282231
54	PLATE-DEPLOY LOCK GUIDE	1	F8-0373
55	RIVET, BLIND-3/16 X 0.19-0.25	8	28647
56	PLATE-SHEAR **	2	F8-0377
57	STOP-STOW LOCK	1	F8-0341
58	SCS 5/16-18 X 1.50 FLAT SKT	1	282261
59	NUT-5/16-18 JAM NYLON SST	1	283146
60	BLOCK-ANTI RATTLE RH	1	F8-0343
61	BLOCK-ANTI RATTLE LH	1	F8-0342
62	NUT, S.S. TEE, 5/16 OD X 1/4 L NECK	4	V2-PF-98
63	SCS-1/4-20 X .625 FLAT SKT	4	28648
64	SCS-3/8-16 X 1.00 BTN SKT	4	28163
65	STRAIN REF 90E	1	26684
66	NUT-3/8-16 NYLON	4	28318
67	BRACKET-HARNESS GUARD	1	F8-0436
68	SCS-5/16-18 X 0.75 BTN SKT SST	4	282285
69	PLUG, 0.31 i , 0.3 TO 0.14 MTL, BLK PL	5	25565
70	MS-7/16-20 x 1" HEX ZINC	4	28933
71	WASHER 7/16 LOCK PL	4	14-16-007
72	WASHER 7/16 FLAT	4	28291
73 *	WASHER 7/16 FLAT	4	28291
74	PLUG-0.50 DIA.. UP TO 0.13 MTL, BLK PLASTIC	1	V2-AC-91
75	PLUG, 0.43-0.45 DIA., UP TO 0.06 THK., BLK	1	26287

* Hardware used for sloping track.

** For straight track only.

NOTES

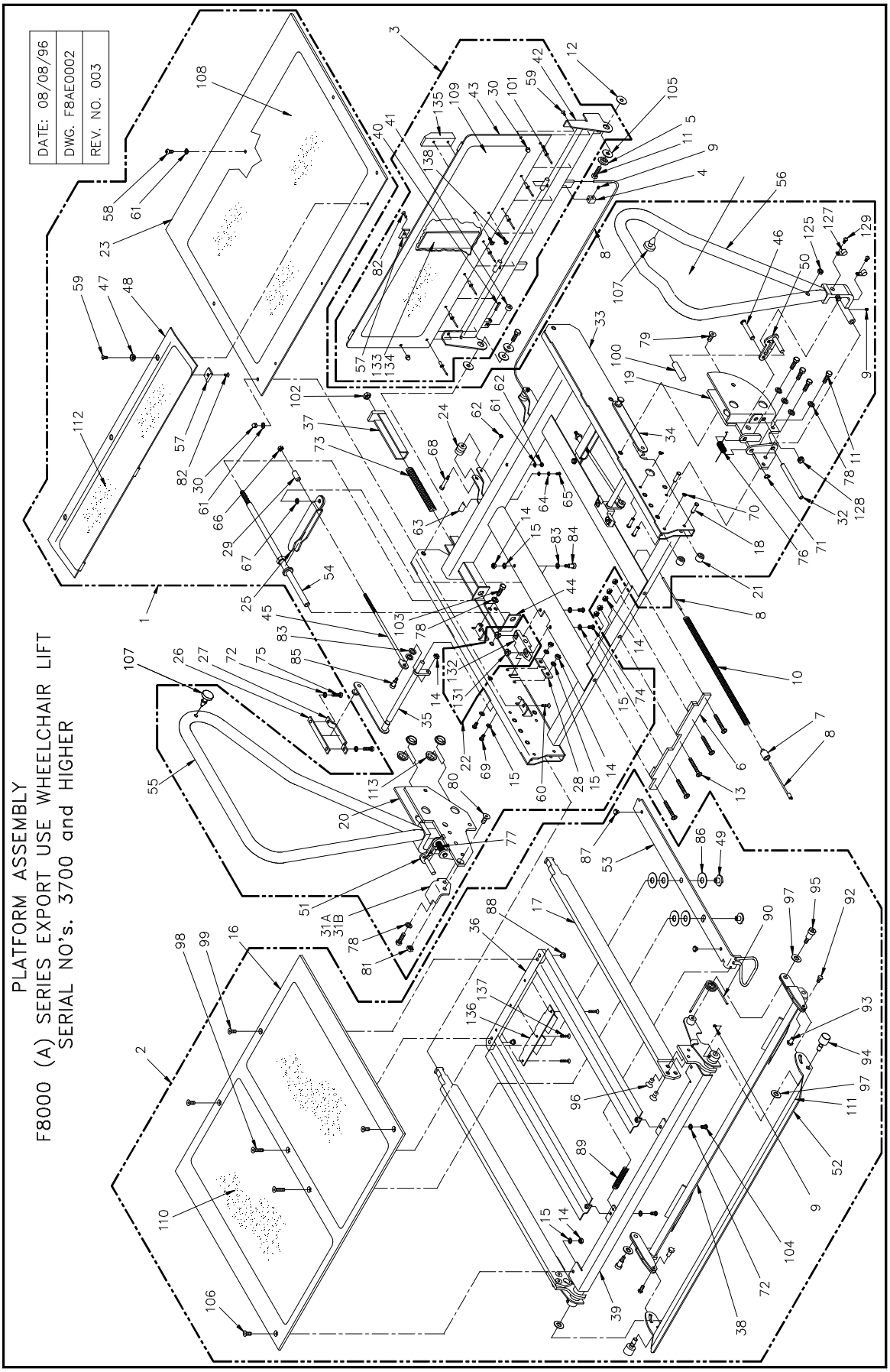


FIGURE [5-5]: PLATFORM ASSEMBLY

PLATFORM ASSEMBLY
F8000 (A) SERIES EXPORT USE WHEELCHAIR LIFT
SERIAL NO's. 3700 and HIGHER

REF.	DESCRIPTION	QTY.	PART NO.
1	FIXED PLATFORM, ASSY.	1	F8-0427
2	SLIDING PLATFORM, ASSY.	1	F8-0428
3	BRIDGEPLATE, ASSY.	1	F8-0421
4	BLOCK, CABLE CLAMP, B-PLATE RETURN	2	F8-0139
5	BUSHING, STIRRUP PIVOT	2	UV-PF-039
6	PLATFORM STOP, WASSY.	1	F8-0440
7	BOBBIN, SPRING GUIDE	2	F8-0243
8	CABLE, BRIDGE PLATE RETURN	2	F8-0255
9	SS-1/4-20 X 0.25 SKT. CUP POINT	4	28200
10	SPRING, COMPR. 0.50 OD X 14" X 0.054 DIA.	2	254615
11	CS-5/16-18 X 1.00 HEX GR5	10	28216
12	WASHER-0.31ID X 1.25OD X .05 FENDER SST.	2	283715
13	SCS-1/4-20 X 2.00 BTN. SKT.	5	28161
14	NUT-HEX 1/4-20 PLATED THIN NYLON	15	14-08-304
15	WASHER-1/4 FLAT	4	28273
16	PLATE, SLIDING PLATFORM SURFACE	1	F8-0022
17	GUIDERAIL, SLIDING PLATFORM	2	F8-0296
18	PIN, ROLLER PIVOT	8	F8-0055
19	BRACKET, MTG., PLATFORM, WASSY., R. HAND	1	F8-0060
20	BRACKET, MTG., PLATFORM, WASSY., L. HAND	1	F8-0061
21	ROLLER, SLIDING PLATFORM	8	F8-0062
22	BLOCK-ASSY. B-PLATE ACTUATOR PIVOT	2	F8-0064
23	PLATE, FIXED PLATFORM SURFACE	1	F8-0094
24	PULLEY, BRIDGEPLATE	2	F8-0081
25	LEVER, BRIDGEPLATE ACTUATOR, WASSY.	2	F8-0086
26	PLATE, PIN GUIDE, UPPER	2	F8-0087
27	PLATE, PIN GUIDE, LOWER	2	F8-0088
28	PLATE, MOUNTING, LINK PIVOT	2	F8-0090
29	COLLAR, SPACER BRIDGEPLATE ADJUSTER	2	F8-0091
30	NUT-10-24 HEX ACORN	6	28296
31A	STRIKER PLATE, STOW LOCK (SN 2188 TO 2299)	1	F8-0098
31B	STRIKER PLATE, STOW LOCK	1	F8-0272
32	SHAFT, HANDRAIL PIVOT	2	F8-0115
33	PLATFORM, FIXED-WASSY.	1	F8-0151
34	ACTUATOR CRANK, R.H., B-PLATE, WASSY.	1	F8-0156
35	ACTUATOR CRANK, L.H., B-PLATE, WASSY.	1	F8-0157
36	DECK SUPPORT, SLIDING PLATFORM, WASSY.	1	F8-0160
37	PUSHROD, B-PLATE ACTUATOR, WASSY.	2	F8-0166
38	ACTUATOR, ROLLSTOP, WASSY.	1	F8-0188
39	SLIDING PLATFORM, WASSY.	1	F8-0414
40	SPRING-PIN 3/16 X 3/4	2	14-33-262
41	ROLLER, BRIDGEPLATE, OD 0.534	2	F8-0203
42	FRAME, BRIDGEPLATE, WASSY.	1	F8-0209
43	PLATE, BRIDGEPLATE	1	F8-0417
44	BRACKET, PULLROD GUIDE	2	F8-0212
45	PULLROD, B-PLATE ACTUATOR, WASSY.	2	F8-0213
46	PIN, LATCH PIVOT	2	F8-0217
47	BUSHING, MOUNTING, SLIDING PLATFORM	3	F8-0218
48	PLATE, PLATFORM RAMP	1	F8-0219
49	PIVOT BUSHING, PLATFORM LOCK	2	F8-0220

REF.	DESCRIPTION	QTY.	PART NO.
50	LATCH, HANDRAIL, R.H. WASSY.	1	F8-0222
51	LATCH, HANDRAIL, L.H. WASSY.	1	F8-0223
52	ROLLSTOP, WASSY.	1	F8-0416
53	BAR, PLATFORM LOCK	1	F8-0227
54	SHAFT, BRIDGEPLATE PUSHROD, WASSY.	2	F8-0233
55	HANDRAIL, LEFT HAND, WASSY.	1	F8-0237
56	HANDRAIL, RIGHT HAND, WASSY.	1	F8-0238
57	SKID, BRIDGE PLATE	6	UL-BA-021
58	SCS-10-24 X 0.75 BTN. SKT. SST.	1	28143
59	SCS-10-24 X 0.50 FLAT SKT. SST.	5	28137
60	MS-10-24 X 5/8 FLAT PHIL	4	28122
61	WASHER-#10 FLAT SST.	6	282715
62	NUT-10-24 NYLON	3	28305
63	CABLE GUIDE	2	F8-0252
64	WASHER-#6 FLAT AN960-6	4	28267
70	RETAINING RING 1/4"	8	14-31-025
71	RETAINING RING 3/8"	2	14-31-037
72	WASHER-1/4 SPLIT LOCK	6	28274
73	SPRING, COMP. .70 OD X 10.38" X .095 SST	2	254616
74	SCS-1/4-20 X 0.50 BTN. SKT. SST	4	281965
75	CS-1/4-20 X 0.875 HEX GR5	4	28180
76	SPRING, HANDRAIL, R.H.	1	F8-0265
77	SPRING, HANDRAIL, L.H.	1	F8-0266
78	WASHER-5/16 SPLIT LOCK	12	28278
79	SCS-5/16-18 X 1.00 FLAT SKT. SST	2	282251
80	SCS-5/16-18 X 0.75 FLAT SKT.	1	28225
82	MS-10-24 X 1/4 PHIL FLAT UNDER CUT	6	28106
83	WASHER-5/16 FLAT	5	28277
84	SHS-5/16 X 0.375, 1/4-20 SKT.	2	28373
85	SHS-5/16 X 0.25, 1/4-20 SKT.	2	283731
86	WASHER, NYLON, .53 ID X 1.40 OD X 0.06	5	28251
87	GUIDE, DRIVE SHAFT PIVOT	2	UV-DS-014
88	BUTTON, GUIDE	2	UV-DS-017
89	SPRING, EXT., 0.50 X 3.50 X 0.054, SST	1	254531
90	SPRING, R.H., ROLLSTOP ACTUATOR RETURN	1	UV-SP-003
91	SPRING, L.H., ROLLSTOP ACTUATOR RETURN	1	UV-SP-002
92	CS-1/4-20 X 0.50 HEX GR5	2	28165
93	NUT,TEE-5/16 OD X 1/2 NECK SST.	2	V2-PF-99
94	PIN-ROLLSTOP PIVOT	2	F8-0392
95	SHS-3/8 X 0.375, 5/16-18 SKT. SST.	2	283735
96	SCS-5/16-18 X 0.50 FLAT SKT. SST	4	282252
97	WASHER, NYLON, .375 ID X .630 X .072	4	28565
98	SCS-1/4-20 X 0.625 FLAT SKT.	6	28163
100	VINYL CAP	2	01653
101	RIVET, BLIND AL 3/16 X 3/8 #AD66BS	7	14-30-309
102	NUT-3/8-16 NYLON	2	28318
103	CS-5/16-18 X 0.625 HEX GR5	4	282239
104	SCS-1/4-20 X 0.50 BTN. SKT. SST.	2	281965
105	WASHER-578ID X 1.067OD X 0.031 NYLON	2	28574
106	SCS-1/4-20 X 0.75 FLAT SKT. SST.	2	28184
107	BUMPER, RUBBER	2	V2-AC-86
108	SAFETY TREAD, 25.50 X 16.00, OCEAN GRAY	1	25663
109	SAFETY TREAD, 25.50 X 7.00, SAFETY YELLOW	1	25665
110	SAFETY TREAD, 21.75 X 11.13, OCEAN GRAY	2	25675
111	SAFETY TREAD, 25.50 X 3.00, SAFETY YELLOW	1	25664
112	SAFETY TREAD, 25.50 X 4.00, OCEAN GRAY	1	25662
113	BUSHING, 12FDU04, 3/4"ID X 1/4"	8	25386
114	PLUG, HANDRAIL, 0.75 DIA. ADHESIVE BACKED	4	F8-0335

REF.	DESCRIPTION	QTY.	PART NO.
125	BUSHING-1/2 SNAP IN	1	28-26-075
127	CLAMP-1/4 NYLON	2	28-02-350
128	GROMMET-0.38 X 0.56 X 0.19	1	26664
129	SCS-8-32 X 0.50 BTN. SKT.	2	28083
131	NUT,TEE-5 /16OD X 1/4 NECK	4	V2-PF-98
132	BLOCK-BRIDGEPLATE ACTUATOR PIVOT	2	F8-0415
133	BLOCK-BRIDGEPLATE GUIDE	1	F9-0290
134	TAPE-ADHESIVE, TRANSFER 10 MIL. X 1.00 WIDE	1	263110
135	BLOCK-B-PLATE GUIDE BUMPER	1	F8-0441
136	BRACKET-PLATFORM STOP	1	F8-0442
137	SCS-10-24 X 0.375 FLAT SKT.	3	28138

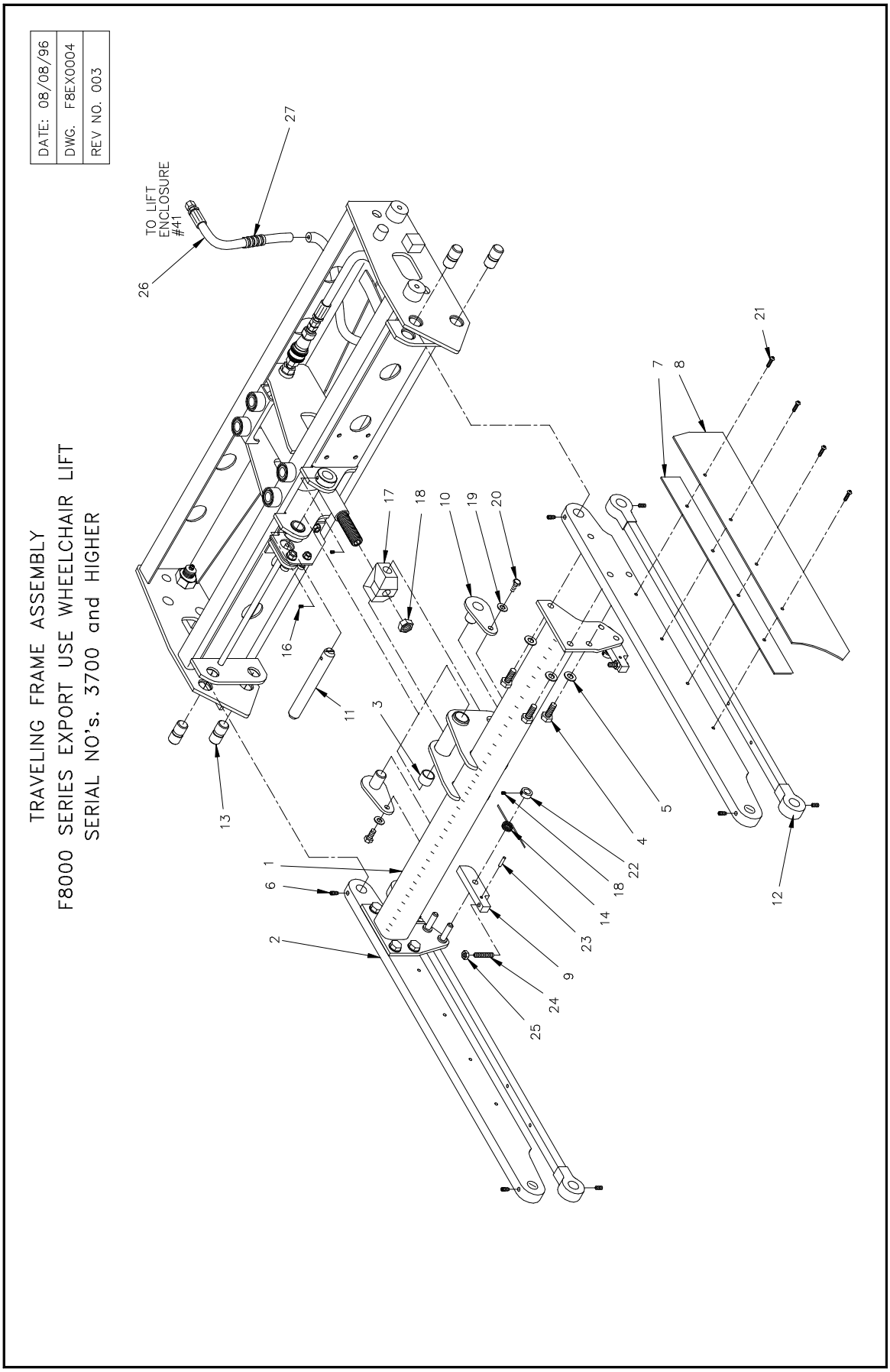


FIGURE [5-6]: TRAVELING FRAME ASSEMBLY

TRAVELING FRAME ASSEMBLY
F8000 (A) SERIES EXPORT USE WHEELCHAIR LIFT
SERIAL NO's. 3700 and HIGHER

REF.	DESCRIPTION	QTY.	PART NO.
1	LIFTING FRAME, WELD ASSEMBLY	1	F8-0051
2	ARM, UPPER	1	F8-0005
3	BEARING, DU, 0.75ID X 0.875OD X 0.63	6	UV-BU-006
4	CS-3/8-16 X 1.00 HEX GR5	6	28235
5	WASHER-3/8 FLAT	6	28283S
6	SS-5/16-18 X 0.50 SKT.	8	14-32-608
7	SHIM, LIFTING ARM COVER	2	F8-0107
8	COVER, LIFTING ARM	2	F8-0108
9	BAR, ROCKER STOP	2	F8-0067
10	KEEPER PLATE, WELD ASSEMBLY	2	F8-0043
11	PIN, 0.75 OD X 6.00	1	F8-0041
12	ARM-WASSY. ,PARALLEL, LOWER	2	F8-0430
13	PIN-PIVOT, LIFTING FRAME	8	F8-0042
14	SPRING-0.051 DIA., 180 DEG., 0.344 ID., LH.	1	254562
15	SPRING-0.051 DIA., 180 DEG., 0.344 ID., RH.	1	254561
16	SS-1/4-20 X 0.25 SKT. CUP POINT	4	28200
17	TRUNION,CYLINDER	1	F8-0044
18	NUT-3/4-16 HEX JAM	1	14-08-110
19	WASHER-5/16 FLAT	2	28277
20	CS-5/16-18 X 0.625 HEX GR5	2	282239
21	SCS-1/4-20 X 1.00 BTN. SKT. SST.	8	28198
22	COLLAR-0.38ID X 0.75OD	2	VS-BU-02
23	PIN,ROLL-5/32 X 0.75	2	28358
24	SS-5/16-18 X 1.50 SKT. CUP POINT	2	282249
25	NUT-5/16-18 HEXJAM	2	28315
26	HOSE-HYDRAULIC, SYNFLEX 46"	1	F8-0253
27	CONDUIT-PLASTIC	35"	27201
28	ARM-UPPER, ADA	1	F8-0364
29	CABLE RETAINER	2	F8-0366
30	CABLE-18/2 POLYURETHANE	16'	27033
31	SHIM-LIFTING FRAME, ADA	1	F8-0364
32	SCS-8-32 X 0.375 FLAT SKT.	2	28068

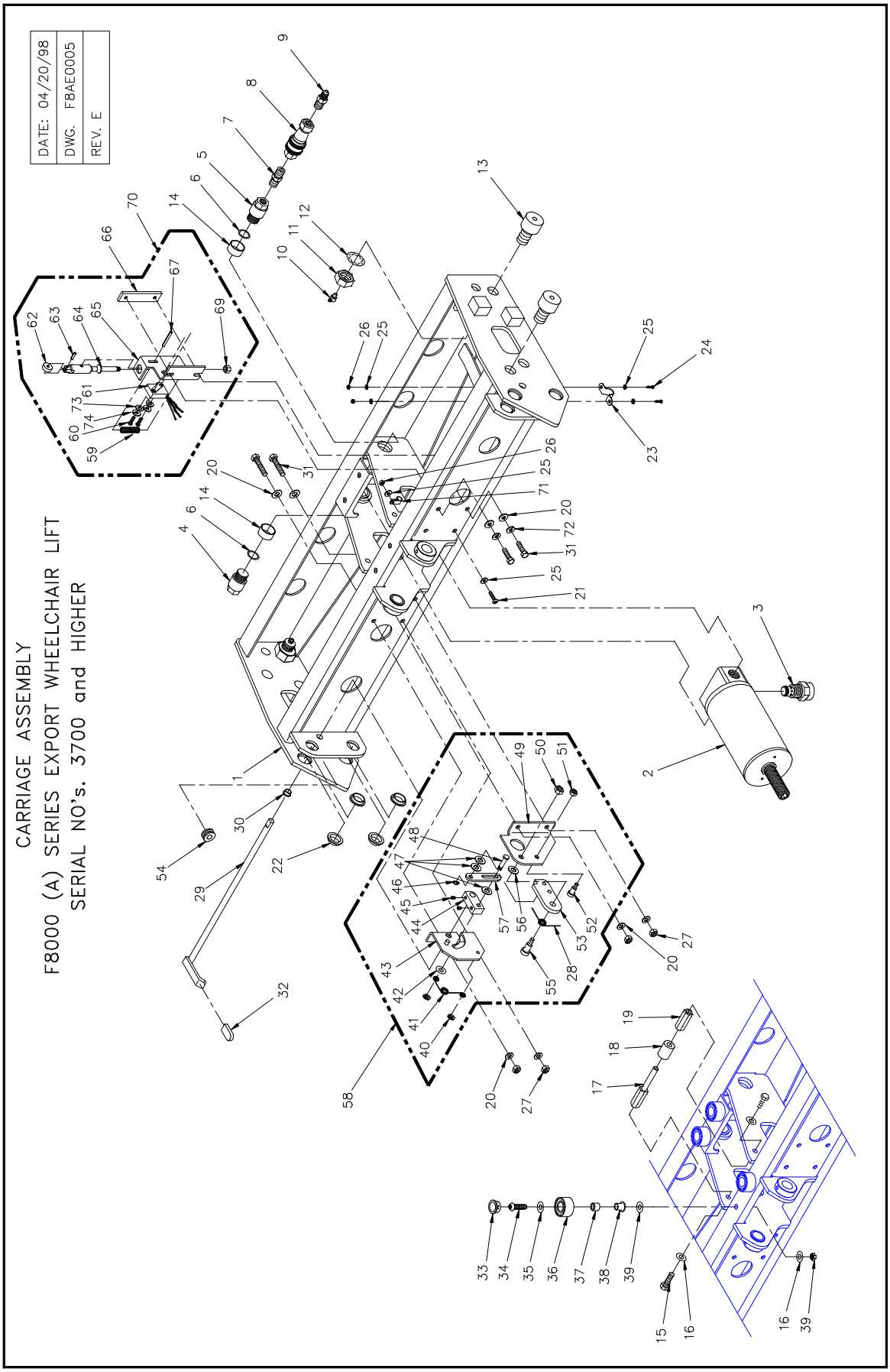


FIGURE [5-7]: CARRIAGE ASSEMBLY

CARRIAGE ASSEMBLY
F8000 (A) SERIES EXPORT USE WHEELCHAIR LIFT
SERIAL NO's. 3700 and HIGHER

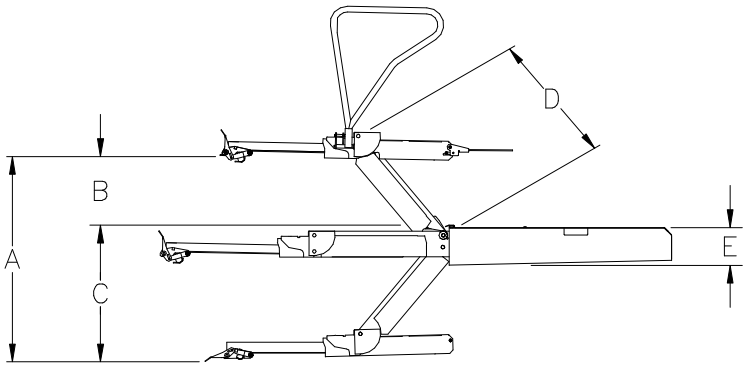
REF.	DESCRIPTION	QTY.	PART NO.
1	CARRIAGE WLDT, COATED	1	F8-0400
2	CYLINDER, HYD.	1	F8-0012
3	FLOW CONTROL, 0.50 GPM	1	V2-SH-70
4	FITTING, PIVOT	1	F8-0009
5	FITTING, PIVOT, 1/4 NPT	1	F8-0008
6	O-RING, NITRILE, 0.644 ID X 0.087W	2	24908
7	FITTING, NIP, 1/4P, STL	1	V2-SH-29
8	FITTING, QUICK-DISCONNECT, 1/4"	1	UV-SH-003
9	FITTING, MCN, 1/4J, 1/4P, STL	1	V2-SH-84
10	FITTING, GREASE, 65 DEG PRESS-IN	4	21-02-011
11	NUT, JAM, 3/4-16	4	14-08-110
12	WASHER, ISL, 3/4	4	14-16-110
13	CAM FOLLOWER, 1-1/4 O.D. X 3/4 CRWND	4	40-20-006
14	BUSHING-16FDU08, 1"D X ½	2	25382
15	SCREW, HEX, 5/16-18 X 3/4	2	28224
16	WASHER, FLT, .32 X .59 X .06 SST	10	28630
17	SHAFT, ALIGNMENT SUPPORT	1	F8-0122
18	ROLLER-ALIGNMENT SUPPORT	1	F8-0124
19	SHAFT-LOCATOR-ALIGNMENT SUPPORT	1	F8-0123
20	WASHER, FLT, .281 X .625 X .065	8	28273
21	SCREW, SHC, 10-24 X 5/8 SST	1	28132
22	BEARING, DU FLNG 3/4 ID X 1/4L	8	25386
23	CLAMP, RETAINING (ZINC PLATED)	1	28407
24	SCREW, BHS, 10-24 X 3/4 SST	2	28143
25	WASHER, FLT, .219 X .50 X .049	4	28271
26	NUT, ESN, 10-24	2	28305
27	NUT, ESN, 1/4-20	4	28309
28	SPRING, 0.071, 90 DEG., 0.375 ID, LH.	1	254565
29	ROD WLDT, DEPLOY LOCK	1	F8-0177
30	BUSHING, FLANGE 0.375 ID X 0.250 L	1	253845
31	SCREW, HEX, 1/4-20 X 3/4 GR5	4	28166
32	CAP, VINYL, RED W/ARROW 0.13 X 0.50 X 1.00	1	F8-0284
33	PLUG W/0.781 DIA HOLE, NYL, BLK.	4	28945
34	SCREW, HEX, 5/16-18 X 3/4 SST	4	282205
36	ROLLER, ALIGNMENT	4	F8-0120
37	BUSHING, ALIGNMENT	4	F8-0121
38	BUSHING, 08FDU06, 1/2" X 3/8"	4	25384
39	NUT, ESN, 5/16-18 SST	4	283145
40	SNAPRING, 1/4" KLIPRING	2	283273
41	SPRING-LATCH RETURN	1	F8-0367
42	WASHER, FLT, .281 X .625 X .065 SST	1	282735
43	PLATE-WASSY. DEPLOY LOCK, LEFT HAND	1	F8-0422
44	BLOCK, DEPLOY LOCK	1	F8-0411
45	SCREW, HSS, 1/4-20 X 1/4 CUP POINT	2	28200
46	SNAPRING 3/4"	1	14-31-025
47	WASHER, FLT, .375 X .63 X .032 NYL	3	28562
48	SHAFT, DEPLOY LOCK	1	F8-0420
49	PLATE, DEPLOY LOCK, RIGHT HAND	1	F8-0313
50	NUT, ESN, 5/16-18 SST	1	283146

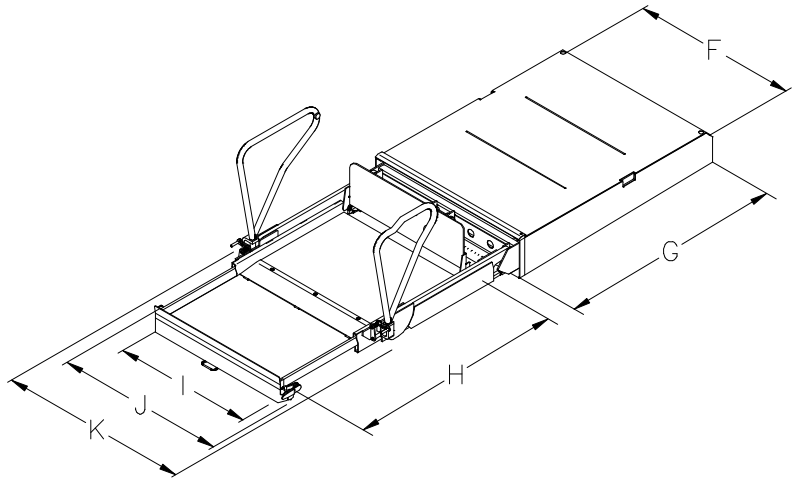
REF.	DESCRIPTION	QTY.	PART NO.
51	NUT, ESN, 1/4-20 THIN	1	14-08-304
52	SCREW, SSS, 5/16 X 5/8 X 1/4	1	14-50-001
53	BAR LATCH, DEPLOY LOCK	1	F8-0409
54	GROMET, .38 X .56 X .19 (X.81 X .38)	1	26664
55	SCREW, SSS, 3/8 X 5/8 SST	1	283765
56	WASHER, FLT, 0.387 X 0.654 X 0.015 NYL	1	282831
57	LINK-DEPLOY LOCK	1	F8-0408
58	DEPLOY LOCK MECHANICAL ASSY.	1	F8-0423
59	SPRING, COMP .468OD X 1 1/4 X .045	1	UV-SP-009
60	SCREW, PHP, 4-40 X 3/4	2	28034
61	SWITCH, ROLLER	1	264103
62	ROLLER, PLUNGER, SWITCH	1	F8-0385
63	ROLLPIN, 5/32 X 1/2 SST	1	283575
64	PLUNGER, ROLLER SWITCH	1	F8-0384
65	BRACKET-WASSY, ROLLER SWITCH	1	F8-0390
66	BAR, ROLLER SWITCH MOUNTING	1	F8-0382
67	ROLLPIN, 5/32 X 1 1/4 SST	1	28359
68		2	
69	NUT, ESN, 1/4-20 THIN, SST	1	283096
70	ROLLER SWITCH-ASSY.	1	F8-0386
71	CLAMP, NYL, 1/4 BLK	1	28-02-350
72	WASHER, SPL, 1/4	2	28274
73	WASHER, FLT 0.128 X 0.313 X 0.032	2	28265
74	WASHER, SPL, #4	2	28266

APPENDIX 1
LIFT SPECIFICATIONS

F8000 (A) SERIES EXPORT USE WHEELCHAIR AND STANDEE LIFT

Power . . . . . electro-hydraulic motor	**Rated load capacity . . . . . 660 lbs.**
Pump rating - 12 volts DC . . . . . 1800 psi, 1250 watt	**Manual backup (up) . . . . . manual hand pump**
Pump rating - 24 volts DC . . . . . 1800 psi, 1250 watt	**Manual backup (down) . . manual pressure release valve**
Hydraulic cylinders . . . . . 3.0", power - up/gravity - down	**Weight . . . . . approx. 406 lbs.**





DIMENSIONS (inches)

	A	B	C	D	E	F	G	H	I	J	K
MODEL	**Floor-to-ground travel**	**Travel Above**	**Travel Below**	**Arm Length**	**Stowed Height**	**Stowed Width**	**Stowed Length**	**Usable Platform Length**	**Usable Platform Width**	**Clear Entry Width**	**Width Traveling Frame**
F8000	**43.8**	**15.6**	**28.2**	**27.3**	**8.6**	**36.2**	**48.0**	**48.0**	**28.5**	**33.5**	**35.0**

32SL228 F8000

NOTES

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